ROYAL BOTANIC GARDENS, KEW.

BULLETIN

OF

MISCELLANEOUS INFORMATION.

APPENDIX III.—1910.

NEW GARDEN PLANTS OF THE YEAR 1909.

The number of garden plants annually described in botanical and horticultural publications, both English and foreign, is now so considerable that it has been thought desirable to publish a complete list of them in the *Kew Bulletin* each year. The following list comprises all the new introductions recorded during 1909. These lists are indispensable to the maintenance of a correct nomenclature, especially in the smaller botanical establishments in correspondence with Kew, which are, as a rule, only scantily provided with horticultural periodicals. Such a list will also afford information respecting new plants under cultivation at this establishment, many of which will be distributed from it in the regular course of exchange with other botanic gardens.

The present list includes not only plants brought into cultivation for the first time during 1909, but the most noteworthy of those which have been re-introduced after being lost from cultivation. Other plants included in the list may have been in gardens for several years, but either were not described or their names had not been authenticated until recently.

In addition to species and well-marked varieties, hybrids, whether introduced or of garden origin, have been included where they have been described with formal botanical names. Mere cultural forms of well-known garden plants are omitted, for obvious reasons.

In every case the plant is cited under its published name, although some of the names are doubtfully correct. Where, however, a correction has appeared desirable, this is made.

The name of the person in whose collection the plant was first noticed or described is given where known.

An asterisk is prefixed to all those plants of which examples are in cultivation at Kew.

The publications from which this list is compiled, with the abbreviations used to indicate them, are as follows :—*B. K.*—Guerke, Blühende Kakteen. *B. M.*—Botanical Magazine. *B. S. B. F.*—Bulletin de la Société Botanique de France. *B. S. D. F.*—Bulletin de la Société Dendrologique de France. *B. T. O.*—Bullettino della

(16416—6a.) Wt 92—428. 1375. 5/10. D & S.

R. Società Toscana di Orticultura. *Gard.*—The Garden. *G. C.*—Gardeners' Chronicle. *Gfl.*—Gartenflora. *G. M.*—Gardeners' Magazine. *Hesse Cat.*—H. A. Hesse, General Nursery Catalogue. *I. S. H. T.*—Icones Selectae Horti Thenensis. *Jard.*—Le Jardin. *J. of H.*—Journal of Horticulture. *J. R. H. S.*—Journal of the Royal Horticultural Society. *J. S. H. F.*—Journal de la Société Nationale d'Horticulture de France. *K. B.*—Bulletin of Miscellaneous Information, Royal Botanic Gardens, Kew. *Lemoine Cat.*—Lemoine, Catalogue. *M. D. G.*—Mitteilungen der Deutschen Dendrologischen Gesellschaft. *M. K.*—Monatsschrift für Kakteenkunde. *N. B. G. Edinb.*—Notes from the Royal Botanic Garden, Edinburgh. *O. R.*—Orchid Review. *Orch.*—Orchis. *R. H.*—Revue Horticole. *R. H. B.*—Revue de l'Horticulture Belge. *Sargent, T. & S.*—Sargent, Trees and Shrubs. *S. C. A. A. Cat.*—Southern California Acclimatizing Association Catalogue. *S. M. C.*—Smithsonian Miscellaneous Collections. *Späth Cat.*—L. Späth, General Nursery Catalogue. *T. H.*—La Tribune Horticole. *Veitch Herb. P. Nov.*—J. Veitch & Sons, New and rare Herbaceous Plants, Novelties. *Veitch, N. H. P.*—J. Veitch & Sons, New Hardy Plants from Western China.

The abbreviations in the descriptions of the plants are :—*diam.*—Diameter. *ft.*—Foot or Feet. *G.*—Greenhouse. *H.*—Hardy. *H. H.*—Half-hardy. *in.*—Inches. *S.*—Stove.

Abies subalpina pendula. (*M. D. G.* 1909, 268, 326.) Coniferae. H. Branches pendulous. (Prince M. Lobkowitz, Eisenberg, Bohemia.)

***Abies Vilmorini.** (*Hesse Cat.* 1909–10, 246.) H. A hybrid between *A. Pinsapo* and *A. cephalonica.* (H. A. Hesse, Weener, Hanover.)

Abutilon longicuspe. (*S. C. A. A. Cat.* 1908, 20.) Malvaceae. G. A much-branched shrub, thickly covered with fine down. Leaves petiolate, broadly ovate, long-acuminate, cordate at the base, serrate. Flowers bluish-purple. See *Oliver, Fl. Trop. Afr.* i. 184. Abyssinia. (Southern California Acclimatizing Association.)

***Abutilon sinense.** (*R. H.* 1909, 171, 450, f. 190 & col. t.; *J. S. H. F.* 1909, p. 185.) G. Leaves very large, broadly ovate, acuminate, cordate at the base, irregularly toothed. Flowers numerous, campanulate, more than 2 in. across, orange-yellow, with broad blotches of brown-red in the centre and veined with the same colour. Central China. (M. L. de Vilmorin, Les Barres, France.)

Acalypha. (*R. H.* 1909, 20–22.) Euphorbiaceae. S. The following hybrids between *A. Sanderiana* and *A. Godseffiana* are described: *Beissneriana, Camphauseniana, Hesdoerfferiana, Johniana, Sandhackiana* and *Wagneriana.* (H. A. Sandhack, Mehlem-on-Rhein, Germany.)

Acanthopanax acerifolium. (*M. D. G.* 1908, 217, 218.) Araliaceae. H. A new species differing from *A. ricinifolium* especially by its leaves, which are more erect, stiffer, larger, and less deeply lobed. Country not stated. (E. Schelle, Tübingen, Germany.)

***Acer laetum aureum.** (*Hesse Cat.* 1909–10, 71.) Sapindaceae. H. A beautiful form with red and golden-yellow leaves. (H. A. Hesse, Weener, Hanover.)

***Acer neglectum Annae.** (*M. D. G.* 1908, 216, 218, col. t.) H. Young leaves dark blood-red, afterwards changing to olive-colour. (Fritz Graf v. Schwerin, Wendisch-Wilmersdorf, Germany.)

Acer neglectum Friderici. (*M. D. G.* 1908, 216, 218, col. t.) H. Young leaves white-yellow, later shining golden-yellow, with reddish veins and petiole. (Fritz Graf v. Schwerin.)

Acer palmatum cristatum. (*Hesse Cat.* 1909–10, 72, f.) H. A weak-growing variety remarkable in having crested leaves. (H. A. Hesse, Weener, Hanover.)

Acer tegmentosum. (*M. D. G.* 1909, 294.) H. A robust plant with densely glaucous branches. Leaves 3-lobed, nearly 6 in. long and 4 in. broad; lobes not reaching to the middle, acuminate; petiole 1¾ in. long, purple-red. Amur Region. (H. A. Hesse, Weener, Hanover.)

*Aconitum Vilmorini. (*R.H.* 1909, 533; *J. S. H. F.* 1909, 585.) Ranunculaceae. H. The correct name for the plant included in the list of 1908 as *A. volubile latisectum*. China. (Vilmorin-Andrieux & Co., Paris.)

*Acriopsis latifolia. (*K. B.* 1909, 368.) Orchidaceae. S. Distinguished by having leaves several times broader than in any other known species. They are broadly oblong, 4–8 in. long, 1¼–2¼ in. broad. Flowers very small, whitish-yellow, with red-purple stripes and spots on the sepals and petals, and red-purple papillae on the disc of the lip. Straits Settlements. (Kew.)

Adiantum elegans × fragrantissimum. (*Gfl.* 1909, 198.) Filices. S. A garden hybrid. (O. Bernstiel, Bornstedt, Potsdam, Germany.)

*Adiantum grossum. (*G. C.* 1909, xlv. 51, ff. 30–31.) G. Fronds pinnate, in a dense tuft, gracefully curved when full grown, up to 25 in. long; pinnae about 25, rather regular, somewhat reniform or semi-orbicular, shortly stalked, the largest 2 in. long and 1½ in. broad, almost leathery, rich green. The species is nearest *A. Balfouri*, but the fronds are larger and are not proliferous at the apex. Colombia. (F. Sander & Sons.)

Agave littaeoides. (*B. T. O.* 1909, 143, f. 4.) Amaryllidaceae. G. A new species allied to *A. Scolymus* in its leaves and flowers. Stemless. Leaves about 30, spathulate, 10–11 in. long, 3¾ in. broad, glaucescent, strongly prickly-toothed, terminated by a stout spine; prickles grey or brown, for the most part hooked and turned towards the apex of the leaf. Scape simple, about 8 ft. high. Inflorescence spike-like, about 20 in. long. Flowers in fascicles of 7–12, greenish-yellow. Perianth-tube funnel-shaped, 7½ lin. long; lobes linear, half as long as the tube. Country unknown. (Florence B. G.)

*Agave Wrightii. (*B. M.* t. 8271.) G. A new species of the *Littaea* section allied to *A. geminiflora*. It has been cultivated under the erroneous name of *A. Taylori*. Trunk short. Leaves somewhat flexible, more or less erect when young, 16–18 in. long, tapering to a fine spine-tipped point; margins sharp, without teeth or prickles, horny on border, which finally shreds into hair-like filaments. Scape about 10 ft. high. Spike about 7 ft. long. Perianth-lobes about 8 lin. long, dark green, with cream-white borders. Central America. (Kew.)

Aloe Marlothii. (*G. C.* 1909, xlvi. 309.) Liliaceae. G. A species with extremely spiny leaves and nearly horizontally spreading flower-spikes. British Bechuanaland. (La Mortola, Italy.)

*Aloe rubrolutea. (*B. M.* t. 8263.) G. A handsome species with a stout unbranched stem 8 ft. high or more. Leaves about 20, in a dense rosette, lanceolate-ensiform, about 2 ft. long, 4½ in. broad, glaucous-green, the margins beset with brown deltoid and somewhat hooked spines. Inflorescence much-branched. Racemes about 1 ft. long. Perianth straight, cylindric, bright red, 1¼ in. long, the inner segments with dark brown tips. Trop. S. W. Africa. (La Mortola, Italy.)

*Amaryllis Parkeri. (*G. C.* 1909, xlv. 92; *J. R. H. S.* xxxv. 225.) Amaryllidaceae. G. or H. H. The name suggested for the garden hybrid between *Amaryllis Belladonna* var. *blanda* and *Brunsvigia Josephinae*, which has been in cultivation at Kew since 1889 and is known as the "Kew Belladonna."

*Amelanchier utahensis. (*Späth Cat.* 1909–10, 77.) Rosaceae. H. A small densely branched shrub. Branches with a brown bark. Leaves cordate, acute, 1–1¾ in. long, coarsely crenate, grey-green. Utah, U.S.A. (L. Späth, Berlin.)

*Androcymbium melanthoides. (*G. C.* 1909, xlv. 315, f. 134.) Liliaceae. G. Bulb like that of a minute tulip. Leaves 2–4, lanceolate, 3–9 in. long, with long subterranean sheaths. Flowers small, numerous, on short stalks, borne in clusters in the axils of large conspicuous bracts, some of which are white with longitudinal green veins, and the largest 3½ in. long and 2 in. broad. S. and Central Africa. (W. E. Gumbleton.)

*Angadenia nitida. (*B. M.* t. 8233.) Apocynaceae. S. A climbing glabrous shrub. Leaves oblong or elliptic, 4–6 in. long, 1½–2½ in. broad, slightly cordate at the base, entire; petiole ⅓–½ in. long. Inflorescences axillary, raceme-like, pedunculate. Flowers nodding, on pedicels ⅓–½ in. long. Corolla yellow, with a vermilion band below the middle of the narrow tube, 1½ in. long; lobes oblique, ovate-rounded, ½ in. long. Trop. S. America. (Kew.) [Syn. *Echites nitida*, Vahl; *Odontadenia nitida*, Muell.-Arg.]

Angraecum expansum. (*G. C.* 1909, xlv. 386; *J. of H.* 1909, lviii. 522.) Orchidaceae. S. An erect-growing

species, with leathery distichous leaves. Inflorescence short, 2-flowered. Flowers white, thick in texture and peculiar in form, with the spur longer than the perianth-segments and curved back. Mascarene Islands. (Sir Trevor Lawrence.)

***Anthurium trinerve.** (*B. M.* t. 8251.) Araceae. S. A herb with an erect rooting stem 4–12 in. high. Leaves lanceolate, acute, cuneate at the base, 4–7 in. long, 1–3 in. broad; petiole 1–4 in. long. Spathe erect or slightly spreading, ovate, acute, green, $\frac{3}{5}$–$\frac{4}{5}$ in. long. Spadix up to 2 in. long. Berries far-exserted, ellipsoid, lilac, $\frac{1}{3}$–$\frac{1}{2}$ in. long. Brazil and Guiana. [This is *A. trinerve*, Miq. and is distinct from *A. trinervium*, Kunth. It has been cultivated for many years at Kew.]

Asparagus Leonis. (*B. T. O.* 1909, 113.) Liliaceae. G. Plant densely branched, unarmed, of a bright emerald green. Cladodes grouped on one side, 6 or 7 together, linear, falcate. Flowers small, white or yellowish, followed by abundant fruit. S. Africa. (C. Sprenger, Naples.)

***Asparagus tetragonus.** (*B. M.* t. 8288.) G. A climbing undershrub; roots bearing numerous elliptic tubers 1¼ in. long, ⅔ in. thick. Stem armed with stout decurved woody thorns 6 lin. long. Cladodes usually in fascicles of 5, linear, 3- or 4-angled, 7 lin. long. Racemes rather numerous, 2½ in. long. Perianth white; segments obovate, 1½ lin. long, obtuse. S. Africa. (Kew.) [Syn. *A. racemosus*, Willd. var. *tetragonus*, Baker.]

***Aster Amellus roseus.** (*R. H.* 1909, 117.) Compositae. H. Flower-heads rose-coloured. (Cayeux and Le Clerc, Paris.)

***Aster Mesa grandiflorus.** (*G. C.* 1909, xlv. 419; xlvi. 53, f. 26; *G. M.* 1909, 518.) H. 'A garden name for a handsome variety of *Erigeron macranthus*. It is an erect bushy plant about 2 ft. high, with bright purple flower-heads 1–2 in. across. (W. Cutbush & Sons.)

Astilbe rivularis gigantea. (*G. C.* 1909, xlvi. 135; *G. M.* 1909, 672.) Saxifragaceae. H. A very large-growing form, the inflorescences reaching a height of about 5 ft. Flowers cream-coloured. (A. Perry.)

***Baikiaea insignis.** (*K. B.* 1909, 342.) Leguminosae. S. An erect evergreen tree reaching a height of 30–40 ft. Leaves abruptly pinnate, 1–2 ft. long, leathery; pinnae slightly oblique, elliptic, 6–12 in. long, up to 4 in. broad. Flowers (when fully expanded) 10 in. across. Calyx 4–5 in. long, with 4 linear segments. Lower petal or lip lemon-yellow; other petals snow-white. The flowers, which are very fugacious, are the largest known in the Leguminosae. W. Trop. Africa. (Kew.)

***Begonia Patriae.** (*G. M.* 1909, 70.) Begoniaceae. G. A garden hybrid between *B. socotrana* and *B. Pearcei*. (V. Lemoine & Son, Nancy.)

***Berberis approximata.** (*K. B.* 1909, 256.) Berberidaceae. H. This is the plant figured in *B. M.* t. 7833 as *B. dictyophylla*. It differs from the true *B. dictyophylla*, Franch. in having the leaves usually denticulate, the flowers much smaller, and the glands of the petals close together. China. (Kew.)

***Berberis Gagnepainii.** (*G. C.* 1909, xlvi, 225, f. 226.) H. An evergreen shrub 3–6 ft. high. Leaves lanceolate, 2–4 in. long, ¼–¾ in. broad, tapering very much towards the apex, coriaceous, spiny on the margin; spines at the bases of the leaves tripartite, ½–⅔ in. long. Flowers in fascicles of usually 5–9, delicate yellow, borne on red pedicels. Fruits ellipsoid, glaucous purple. This is figured in *B. M.* t. 8185 as *B. acuminata*, but the true *B. acuminata*, Franch. is less compact in habit, has larger coarser and thicker leaves, and stouter spines. China. (J. Veitch & Sons.)

Betula Koehnei. (*Späth Cat.* 1909–10, 80.) Cupuliferae. H. A hybrid between *B. pendula* and *B. papyracea*. (L. Späth, Berlin.)

Bolusanthus speciosus. (*S. C. A. A. Cat.* 1908, 14.) Leguminosae. G. Tree up to 25 ft. high. Leaves petiolate, 4–10 in. long; leaflets in 3–6 pairs, obliquely lanceolate, 2–3 in. long, 5–10 lin. broad. Racemes terminal, recurved-pendulous, 3–4½ in. long, 10–30-flowered. Flowers handsome, bright blue, about ¾ in. long. S. Africa. (Southern California Acclimatizing Association.) [Syn. *Lonchocarpus speciosus*, Bolus in Journ. Linn. Soc. xxv. 161.]

***Bomarea Wercklei.** (*Lemoine Cat.* 1909, n. 173, 3.) Amaryllidaceae. G. Stems sarmentose. Leaves lanceolate, acuminate, bright green. Flowers about 12, in a terminal umbel; outer segments vermilion-orange; inner broad, rounded, orange-yellow. Mountains of Costa Rica. (V. Lemoine & Son, Nancy.)

Brasso - cattleya sandhaghensis. (*O. R.* 1909, 241, f. 19.) Orchidaceae. S. A garden hybrid between *Brassavola Digbyana* and *Cattleya Schilleriana*. (G. H. Müller, Huis Sandhaghe, Den Haage, Holland.)

Brasso-cattleya Susannae. (*O. R.* 1909, 137, f. 11.) S. A garden hybrid between *Cattleya Thayeriana* and *Brassavola Digbyana*. E. O. Orpet, South Lancaster, Mass., U.S.A.)

Brasso - laelio - cattleya Cooksonii. (*G. C.* 1909, xlv. 108, 141.) Orchidaceae. G. A garden hybrid between *Brassolaelia Gratrixiae* and *Cattleya Dowiana*. (N. C. Cookson.)

Brunsvigia Josephinae × Amaryllis Belladonna. (*G. C.* 1909, xlv. 57, suppl. ill.) Amaryllidaceae. G. or H. H. A garden hybrid of which the *Brunsvigia* is the seed-parent. (C. G. van Tubergen, Jun., Haarlem.) [See **Amaryllis Parkeri.**]

***Bulbophyllum campanulatum.** (*K. B.* 1909, 62; *B. M.* t. 8281.) Orchidaceae. S. An elegant little plant, with closely-set ovoid-oblong 1-leaved pseudobulbs, ¾–1 in. long. Leaves oblong, obtuse, leathery, 3-3½ in. long, about ¾ in. broad, purple beneath. Scapes slender, suberect, decurved at the apex, 3 in. long, about 10-flowered. Flowers umbellate, radiating so as to form a somewhat campanulate inflorescence. Dorsal sepal and petals very pale whitish-yellow, with dull purple stripes, 2–3 lin. long. Lateral sepals pale pink, with dark dots, 8 lin. long. Lip dull reddish-purple, 1½–2 lin. long. Sumatra. (Kew.)

Bulbophyllum nudiscapum. (*K. B.* 1909, 365.) S. Near *B. barbigerum*. Pseudobulbs 4-angled, broadly oblong, about 2 in. long, 1-leaved. Leaves oblong, 4½–6 in. long, 1¼–1¾ in. broad. Scapes 12–20 in. long. Racemes elongated, many-flowered. Sepals subconnivent, scarcely ½ in. long, green, with dark brown markings at the base. Petals bristle-like, very small. Lip scarcely ½ in. long, linear, dilated and folded at the base, purple, copiously hairy. Sierra Leone; Congo. (A. Imschoot, Mont - St. - Amand, Ghent.)

Calanthe Hennisii. (*G. C.* 1909, xlvi. 34.) Orchidaceae. S. A new species resembling *C. vestita*, but it differs in having the scape, pedicels and back of the sepals more villous, and the lobes of the lip are rather narrower, while the bracts are relatively broader. Flowers slightly smaller, white, with a slight tinge of sulphur, and with a yellow throat to the lip. Philippines. (W. Hennis, Hildesheim, Germany.)

***Calathea Louisae.** (*B. S. B. F.* 1908, Sess. extr. xlii.) Scitamineae. S. Plant nearly 3 ft. high. Leaves ovate or ovate-lanceolate; blade up to 9 in. long and 3¾ in. broad, blotched above on both sides of the midrib with whitish - green, beautiful red beneath; petiole up to 2 ft. long. Spike radical, sessile, ovate or cylindric, 2½ in. long, pure white; bracts 5–10, transversely elliptic. Flowers nearly 1 in. long. Country unknown. (Chantrier frères, Mortefontaine, France; Paris B. G.) [Syn. *Maranta Louisae*, Hort.]

Calceolaria profusa. (*G. C.* 1909, xlv. 332.) Scrophulariaceae. G. A tall-growing free-flowering plant resembling *C. Burbidgei*. (L. Sutton.) [= *C. Clibrani*.]

Calla Rehmanni × Elliottiana. (*G. C.* 1909, xlvi. 162, f. 68.) Araceae G. A garden hybrid. (A. Ragionieri, Castello, Florence.)

Callista amabilis. (*G. C.* 1909, xlvi, 354, 431.) Orchidaceae. S. Very similar to some of the species of *Dendrobium*. Flowers borne on the leafless stems of the previous year, about 1 in. across, white, changing to very pale lilac. Sepals united at the base, bearing on the reverse side a vivid pea-green spot. Lip deeply saccate at the base, entire. Mentum absent. Annam. (H. Goldschmidt, Essen, Germany.) [Syn. *Dendrobium amabile*, O'Brien; G. C. 1909, xlvi. 393.]

Caltha palustris Tyermani. (*G. M.* 1909, 415, f.) Ranunculaceae. H. A dwarf form with golden-yellow flowers. (R. Wallace & Co.)

Campanula pyramidalis compacta. (*Gard.* 1909, 52, 54, f.) Campanulaceae. H. Much dwarfer than the type. Flowers much larger and of greater substance. (Duke of Northumberland.)

Campanula pyramidali-versicolor. (*J. S. H. F.* 1909, 431; *R. H.* 1909, 390.) H. A garden hybrid between the species indicated in the name. (Cayeux and Le Clerc, Paris.)

Caragana Boisi. (*Späth Cat.* 1909-10, 82.) Leguminosae. H. The correct name for the plant included in the list of 1904 as *C. microphylla* var. *crasse aculeata*. It is quite distinct from *C. microphylla*, but is allied to

C. arborescens, differing in having stouter spines, more or less persistent leaflets of firmer texture, and pubescent ovary and young fruit. See *Schneider, Ill. Handb. Laubholzk.* ii. 96, f. W. China. (M. L. de Vilmorin, Les Barres, France; L. Späth, Berlin.)

*Carrierea calycina. (*Lemoine Cat.* 1909, n. 173, v.; *K. B.* 1909, 353, as *Carrieria*.) Bixaceae. H.? A deciduous tree 20–40 ft. high, with a wide-spreading head of branches. Leaves petiolate, ovate, up to 5 in. long, shortly and abruptly acuminate, coarsely crenate. Panicles terminal, 6 in. long. Flowers cup-shaped, ¾–1 in. across, very pubescent, bluish-white. Fruit a capsule, 3–4 in. long, pubescent. China. (Arnold Arboretum.) [This was included in the list of 1896, but the seeds distributed in Europe about that date failed to germinate.]

Catasetum Trulla var. flavo-viride. (*Orch.* 1909, 126.) Orchidaceae. S. Sepals, petals and lip yellow-green, the apex of the petals and upper surface of the lip brown-dotted, the latter yellow at the base, with the lateral lobes minutely fimbriate. (H. Goldschmidt, Essen, Germany.)

Cattleya Lambeauiae. (*R. H. B.* 1909, 369; *T. H.* 1909, 754.) G. Orchidaceae. A garden hybrid between *C. Trianae alba* and *C. Hardyana alba*. (F. Lambeau, Brussels.)

Cattleya Pletzii. (*Orch.* 1909, 19.) G. A garden hybrid between *C. granulosa* and *C. Percivaliana*. (T. Franke, Gross-Ottersleben, Magdeburg, Germany.)

Cattleya Roupelliana. (*G. C.* 1909, xlvi. 205.) G. A garden hybrid between *C. superba* and *C. Hardyana*. (R. G. Thwaites.)

Cattleya Trianae var. Holmesii. (*G. C.* 1909, xlv. 124; *O. R.* 1909, 87.) G. A finely-shaped flower, with broad petals and a rich rose-purple lip. (J. McCartney.)

Cattleya Verdonckiana. (*R. H. B.* 1909, 241; *T. H.* 1909, 469.) G. A garden hybrid between *C. resplendens* and *C. Warneri*. (F. Lambeau, Brussels.)

Celastrus angulatus. (*B. T. O.* 1909, 226, f. 7.) Celastraceae. H. A shrub 23 ft. high or more, with long trailing shoots. Leaves orbicular or elliptic, 4–7 in. across, deep green. Flowers inconspicuous. China. (A. Biondi, Castelfalfi, Montaione, Italy.)

*Celastrus flagellaris. (*Hesse Cat.* 1909–10, 193; *M. D. G.* 1909, 284.) H. A rapid-growing climbing species, with very short hook-like thorns. Amur Region; Corea. (H. A. Hesse, Weener, Hanover.)

Centema biflora. (*G. C.* 1909, xlvi. 147, f. 61.) Amarantaceae. G. Stem erect, 2–3 ft. high, slender; nodes swollen. Leaves opposite, linear-lanceolate, up to 3 in. long and ½ in. broad. Inflorescence a terminal pedunculate spike, 2–3 in. long and ½ in. broad, dull magenta. Flowers small, mixed with numerous membranous bracts. The plant resembles in habit a tall-growing *Dianthus*. Trop. Africa. (Chelsea B. G.)

Cephalocereus De Laetii. See Echinocereus De Laetii.

Cephalostachyum pergracile. (*S. C. A. A. Cat.* 1908, 5.) Gramineae. G. A very elegant bamboo. It grows in clumps and reaches a height of 40 ft. Stems 2–3 in. thick. Leaves up to 14 in. long. Burma. (Southern California Acclimatizing Association.)

Cercestis congensis. (*R. H. B.* 1909, 381.) Araceae. S. Climbing and rooting at the nodes. Leaves long-stalked; blade 7 in. long and nearly as broad; petiole 8–12 in. long. Fruiting-peduncle about half as long as the petiole. Spadix somewhat shorter than the peduncle. Fruits red. See *Engl. Bot. Jahrb.* xv. 448. Congo. (Brussels B. G.)

Cereus Guelichii. (*M. K.* 1909, 17, f.) Cactaceae. G. Stem sinuous, climbing, scarcely branched, dark green. Ribs usually 3, undulate, sharp. Areolae very small, clothed with white felt. Radial spines 4 or 5, the 2 upper strongest, ¾–1 in. long, the rest 2–2½ in. long and often disappearing with age; central spine solitary, ¾–1 in. long. Flower 8–10 in. long, faintly rose-scented; outer perianth-segments green, 2–4½ in. long; inner white, up to 4 in. long. Fruit red-violet, almost globose, spineless. Paraguay and Argentina. (Darmstadt B. G.)

Cereus lepidanthus. (*M. K.* 1909, 177.) G. Stems slender, less than 3½ in. thick, up to 13 ft. long. Ribs 7–9, slightly raised, separated by flat trough-like furrows. Areolae ⅔ in. apart, circular, scarcely ¼ in. across. Radial spines 10 at most, 5–8 lin. long, all bent towards the stems; upper often wanting and replaced by 2 of the 5 central spines, the lowermost of which is directed outwards and is up to 2½ in. long. Flower cylindric, 3 in.

long, 1 in. broad, persisting a long time; outer perianth-segments yellow-green, with carmine margins; inner fire-red below and clouded with yellow, sepia-brown on the upper membranous half. Guatemala. (Cultivated in Germany?)

Cereus Purpusii. (*M. K.* 1909, 150.) G. Stems branched, climbing, rooting; joints long, sharply 3- or 4-angled, horny on margins; angles subcrenate. Areolae small, tomentose. Spines 3–6, very minute, very rough. Flowers funnel-shaped, about 10 in. long and 8 in. across in the broadest part; outer perianth-segments narrow, purplish; middle golden; innermost broad, white, golden at the acuminate apex. Mexico. (Darmstadt B. G.)

Cereus saxicola. (*M. K.* 1909, 75, f.) G. Stems slender, erect or reclinate, cylindric, branched. Ribs 6–9, low, at first rounded, then subacute, somewhat curved. Areolae scarcely ½ in. apart, clothed with short yellow-grey wool. Radial spines 5–8; central spines 1–3, larger. Flowers nearly 5 in. long; outer perianth-segments broadly linear-lanceolate, greenish-white, brown-tipped, with green midrib; inner narrower, white, with a green tint. Argentina. (Darmstadt B. G.)

***Ceropegia barbertonensis.** (*G. C.* 1909, xlvi. 101.) Asclepiadaceae. S. Leaves sometimes variegated with pale green along the veins. Flowers similar in shape to those of *C. Woodii* and *C. debilis*. Transvaal. (W. E. Ledger.)

***Ceropegia Brownii.** (*K. B.* 1909, 326.) S. Stem twining, glabrous. Leaves spreading, ¾–2 in. long, ½–1 in. broad, lanceolate or ovate, scarcely fleshy, glabrous; petiole 2½–5 lin. long. Peduncles lateral, 5–6 lin. long, 1- or 2-flowered. Corolla-tube about 1¾ in. long, inflated at the base, constricted above the middle, cylindric above, abruptly dilated at the apex, pale green, with dark blotches; lobes erect-connivent, 7 lin. long, greenish, with a zone of white and dark purple in the middle. Uganda. (W. E. Ledger.)

***Ceropegia discreta.** (*K. B.* 1909, 262.) S. A tuberous herb; stem twining, slender, glabrous. Leaves petiolate, linear-lanceolate, 2½–4 in. long, ⅓–⅓ in. broad, coriaceous or somewhat fleshy. Umbels lateral, pedunculate, 2–8-flowered. Corolla 1¼ in. long, curved; tube elliptic-oblong, inflated at the base, whitish, dark-veined, cylindric above and purple; lobes connate at the apex, ¼ in. long, ovate-lanceolate, pale yellow at the base, purple-green at the apex. Madras. (Kew.)

***Ceropegia Rendallii.** (*G. C.* 1909, xlvi. 101.) S. A small twining species, with a remarkable flower having an umbrella-like canopy surmounting the corolla. Transvaal. (W. E. Ledger.)

Chamaecyparis Lawsoniana pulcherrima. (*Hesse Cat.* 1909–10, 255.) Coniferae. H. A loosely-branched form with white glistening leaves. (H. A. Hesse, Weener, Hanover.) [*Cupressus.*]

Chamaecyparis Lawsoniana schongariensis. (*Hesse Cat.* 1909–10, 255.) H. Branches spreading, lax, sickle-shaped, with the young growths a glistening steel-green. (H. A. Hesse, Weener, Hanover.) [*Cupressus.*]

Chamaecyparis Lawsoniana spiralis. (*M. D. G.* 1909, 268, 327.) H. Remarkable in having the stem spirally twisted. (Prince M. Lobkowitz, Eisenberg, Bohemia.) [*Cupressus.*]

Chamaedorea bambusoides. (*S. C. A. A. Cat.* 1908, 1.) Palmae. S. Stems tufted, thin, reed-like, with feathery light-green leaves. Honduras. (Southern California Acclimatizing Association.)

Cheiranthus Allionii hybrida. (*G. C.* 1909, xlv. 331.) Cruciferae. H. Flowers brownish-yellow, about the size of those of the common wallflower. (Miss Willmott.)

Chlorophytum Huyghei. (*R. H. B.* 1909, 381.) Liliaceae. S. Leaves about 14, in a basal tuft; blade lanceolate, 12 in. long, 2–2½ in. broad; petiole about 7 in. long. Raceme bracteate, 10–32 in. long. Pedicels slender, about ½ in. long. Flowers greenish-white, about ¼ in. long. See *Ann. Mus. Congo*, Bot. ser. 5, iii. 55, t. 1. Congo. (Brussels B. G.)

Cineraria flavescens. (*G. C.* 1909, xlv. 268, 300, 322, f. 139; *G. M.* 1909, 371; *Gard.* 1909, 247, 252, f.) Compositae. G. A garden hybrid between *Cineraria* "Feltham Beauty" and *Senecio auriculatissimus*. (J. Veitch & Sons.)

***Cirrhopetalum longissimum.** (*G. C.* 1909, xlvi. 364; *O. R.* 1909, 373.) Orchidaceae. Scape slender, bearing an umbel-like inflorescence of about 7 flowers. Lateral sepals closely approximate, 9–12 in. long, cream-white,

with 5 lilac-pink stripes, terminating in slender tails. Upper sepal arched over the lip, white, with purple lines. Petals small, similarly coloured. The species is probably nearest allied to *C. grandiflorum*, and is remarkable for its very long lateral sepals. Siam. (Sir Trevor Lawrence.)

Cirrhopetalum pulchrum var. **Cliftonii.** (*G. C.* 1909, xlvi. 136; *J. of H.* 1909, lix. 219, f.; *O. R.* 1909, 328, f. 26.) S. Flowers in large umbels, cream-white, profusely spotted with deep rose. Dorsal sepal furnished with a bristle-like appendage. (Charlesworth & Co.)

***Clematis montana Wilsonii.** (*G. C.* 1909, xlvi. 173.) Ranunculaceae. H. A late summer- or autumn-flowering form. China. (J. Veitch & Sons.)

Cleome gigantea hybrida. (*R. H.* 1909, 195.) Capparidaceae. S. The tall stems terminate in large umbels of flowers which vary in colour from pure white to lilac or purple. (E. Thiébaut, Paris.)

***Clerodendron ugandense.** (*B. M.* t. 8235.) Verbenaceae. G. A new species allied to *C. myricoides* (*B. M.* t. 5838), from which it differs in having much shorter semi-orbicular calyx-lobes, a shorter corolla-tube and larger more deeply coloured corolla-lobes. Flowers violet-blue, in lax panicle-like cymes. Corolla-tube about ¼ in. long; lobes unequal, the lowermost concave, ¾ in. long, the others flat, ⅓ in. long. British E. Africa. (Kew.)

***Cocos Arechavaletana.** (*S. C. A. A. Cat.* 1908, 1.) Palmae. S. Similar to *C. Romanzoffiana*, but it grows taller and makes larger crowns. Uruguay. (Southern California Acclimatizing Association.)

***Cocos campestris.** (*S. C. A. A. Cat.* 1908, 1.) S. Only 10–15 ft. high. Leaves gracefully recurved. S. Brazil. (Southern California Acclimatizing Association.)

Cocos pulposa. (*S. C. A. A. Cat.* 1908, 2.) S. Very similar to *C. eriospatha*, but it bears in profusion larger fruits which have a delicious pulp. S. Brazil. (Southern California Acclimatizing Association.)

***Coprosma Petriei.** (*G. C.* 1909, xlvi. 341.) Rubiaceae. H. A small growing plant, forming a dense cushion as compact as a thyme. Fruits purplish. New Zealand. (Glasnevin B. G.)

Coreopsis radiata. (*J. S. H. F.* 1909, 476.) Compositae. H. Apparently of garden origin. Plant very dwarf. Flower-heads with the ray-florets rolled up. (Fortin & Laumonnier, Paris.)

Cornus alba splendens. (*M. D. G.* 1909, 326, 327.) Cornaceae. H. Remarkable for its intensely scarlet-red branches and branchlets. New York. (R. Demcker, New York.)

***Cornus controversa.** (*B. M.* sub t. 8261; *K. B.* 1909, 331.) H. A new name for the plant cultivated in England as *C. brachypoda* and in other countries as *C. macrophylla*. It has alternate leaves and branches, while the true *C. macrophylla*, Wall., with which *C. brachypoda*, C. A. Mey, is synonymous, has opposite leaves and branches. India; China; Japan Corea.

Corydalis Wilsoni - thalictrifolia. (*J. S. H. F.* 1909, 232.) Papaveraceae. H. A garden hybrid between the species named. (Ph. L. de Vilmorin, Verrières-le-Buisson, France.)

***Cotoneaster moupinensis** forma **floribunda.** (*B. M.* t. 8284.) Rosaceae. H. The name given to the plant included in the list of 1904 as *C. bullata*. It only differs from typical *C. moupinensis* by having more flowers in the corymbs.

Craspedia alpina. (*Gard.* 1909, 347.) Compositae. H. H. Similar to the following in growth and habit, but the flower-heads are white and the leaves a brighter green. New Zealand. (Glasnevin B. G.) [*C. uniflora* var. *lanata*, Cheesem.]

***Craspedia uniflora.** (*Gard.* 1909, 347.) H. H. Leaves in a rosette, 3–6 in. long, hairy above, densely white-tomentose beneath, white on the margin. Flower stems up to 1 ft. high, terminated by a solitary globose deep yellow flower-head 1–1½ in. across. Florets all tubular. New Zealand. (Glasnevin B. G.)

***Crocus Sieberi versicolor.** (*G. C.* 1909, xlv. 205; *G. M.* 1909, 266; *Gard.* 1909, 171, 201, f.) Iridaceae. H. Outer perianth-segments white, feathered with purple or dark violet; inner white, yellow at the base inside. Stigmas deep orange. (G. Reuthe.)

Cycnoches densiflorum. (*K. B.* 1909, 63; *O. R.* 1909, 104, f. 9; *B. M.* t. 8268.) Orchidaceae. Pseudobulbs erect, about 6 in. long. Leaves oblong-

lanceolate, acute or acuminate, 5–6½ in. long, 1¼–1¾ in. broad. Racemes of both sexes produced by the same pseudobulb; male pendulous, about 14 in. long, many-flowered; female suberect, 2 in. long, 2-flowered. Flowers diverse in shape, size and colour, ¾–1¾ in. long, the female green, with an ivory-white lip, and the male lighter green or yellow-green, with brown spots. Colombia. (Rev. J. C. B. Fletcher.)

Cymbidium Tracyanum × elegans. (*G. C.* 1909, xlv. 333.) Orchidaceae. G. A garden hybrid. (J. Forster Alcock.)

Cypripedium ardwickense. (*G. C.* 1909, xlv. 30.) Orchidaceae. S. A garden hybrid of unknown parentage. (E. Rogerson.) [*Paphiopedilum.*]

Cypripedium argentum. (*G.C.* 1909, xlvi. 239.) S. A garden hybrid between *C. Stonei* and *C. Chamberlainianum.* (Rev. J. Crombleholme.) [*Paphiopedilum.*]

Cypripedium Boltonii. (*G. C.* 1909, xlvi. 364, 407; *G. M.* 1909, 947; *J. of H.* 1909, lix. 529, f.) G. A garden hybrid probably between *C. insigne Sanderae* and *C. niveum.* The flowers are wax-like and of the purest white, with a few minute dark dots on the lower part of the dorsal sepal. (W. Bolton; J. H. Craven.)

Cypripedium callosum viride. (*Orch.* 1909, 19.) S. Flowers greenish. (O. Beyrodt, Marienfelde, Berlin. [*Paphiopedilum.*]

Cypripedium Charlesworthii Bromilowiae. (*G. C.* 1909, xlv. 46.) S. Flowers pale green and pure white. (H. J. Bromilow.) [*Paphiopedilum.*]

Cypripedium Durandianum. (*T. H.* 1909, 270.) S. A garden hybrid between *C. ciliolare* and *C. Godefroyae leucochilum.* (F. Lambeau, Brussels.) [*Paphiopedilum.*]

Cypripedium Hartleyanum. (*O. R.* 1909, 178.) S. A garden hybrid between *C. Godefroyae* and *C. Chamberlainianum.* (Keeling & Sons.) [*Paphiopedilum.*]

Delphinium Moerheimei. (*G. C.* 1909, xlv. 419; *G. M.* 1909, 518, 628, 631, f.) Ranunculaceae. H. A hybrid between *D. sinense album* [*D. grandiflorum*] and a garden variety. (W. Cutbush & Sons.)

***Dendrobium acuminatum.** (*G. C.* 1909, xlvi. 136, 150, f. 64; *G. M.* 1909, 659, 672, f.) Orchidaceae. S. A dwarf-growing species allied to *D. Treacherianum.* Racemes elongated. Flowers more than 2 in. across, white, delicately tinted with rose-pink. Philippines. (Moore, Ltd.)

Dendrobium amabile. See **Callista amabilis.**

Dendrobium atro-Brymerianum. (*G. C.* 1909, xlv. 141; *O. R.* 1909, 91.) S. A garden hybrid between *D. atro-violaceum* and *D. Brymerianum.* (R. G. Thwaites.)

Dendrobium Goldschmidtii. (*O. R.* 1909, 63.) S. A pretty new species, reaching over a foot in height. Racemes short, axillary, about 12-flowered. Flowers about ½ in. long, deep rose-purple. Formosa. (H. Goldschmidt, Essen, Germany.)

Dendrobium muricatum var. **munificum.** (*O. R.* 1909, 347; *G. C.* 1909, xlvi. 174, as *D. muricatum.*) S. Plant of robust habit. Pseudobulbs ovoid-oblong, 1- or 2-leaved. Leaves coriaceous, elliptic-oblong. Inflorescence terminal, arching, about 8 in. long, many-flowered. Flowers about 1 in. across. Sepals and petals cream-white or greenish-white, marked with brownish-purple. Lip narrow, crimped on the front half, purple at the base, yellow in front. New Caledonia. (Glasnevin B. G.)

***Dendrobium Sanderae.** (*G. C.* 1909, xlv. 374, f. 163; xlvi. 100; *G. M.* 1909, 621, 634, f.; *O. R.* 1909, 209, f. 17.) S. A new species allied to *D. Dearei.* Stems 1½–3 ft. long, very leafy, striate, thickened below the middle. Leaves oblong, 1¾–2 in. long, 5–7½ lin. broad, slightly bilobed at the apex. Racemes short, lateral on the upper part of the stem, 3- or 4-flowered. Pedicels about 1¾ in. long. Sepals pure white, lanceolate or oblong-lanceolate, 1¼–2 in. long; spur about 1¼ in. long, blackish-violet inside. Petals pure white, 1½ in. long, 1 in. broad. Lip 3-lobed, about 1 in. across, white with green lines, blackish-purple on the side lobes and at the throat. Philippines. (F. Sander & Sons.)

Dendrobium sanguinolentum album. (*G. C.* 1909, xlvi. 195.) Flowers white when fully developed. (J. Geddes.)

Dendrobium taurinum Colmanii. (*G. C.* 1909, xlvi. 268; *G. M.* 1909, 813, 828, f.) S. Sepals reflexed, clear

white. Petals erect, twisted, rose-pink. Lip shovel-shaped, white, margined with rose. Philippines. (Sir J. Colman.)

Dendrochilum glumaceum var. **validum.** (*O. R.* 1909, 81, f. 8.) Orchidaceae. S. Stouter in habit than the type, with much broader leaves. Philippines. (G. Shorland Ball.)

Deutzia crenata magnifica. (*Lemoine Cat.* 1909, n. 173, vi. f.) Saxifragaceae. H. A garden hybrid between *D. crenata candidissima plena* and *D. Vilmorinae*. (V. Lemoine & Son, Nancy.)

Deutzia discolor elegantissima. (*Lemoine Cat.* 1909, n. 173, vi. f.) H. A garden hybrid between *D. scabra* and *D. discolor purpurascens*. (V. Lemoine & Son, Nancy.)

***Dianthus Pancicii.** (*G. C.* 1909, xlv. 809.) Caryophyllaceae. H. A tall-growing species, with sturdy erect flowering-stems reaching a height of 2½-3 ft. Leaves grass-like, in a dense basal tuft. Flowers light crimson, in a dense terminal head. The variety *grandiflorus* has stouter stems, larger flower-heads, and larger purple-carmine flowers. Bulgaria. (S. Arnott.)

Duvernoya Dewevrei. (*R. H. B.* 1909, 379.) Acanthaceae. S. A tufted herb growing to about 2 ft. high. Leaves petiolate, oblong. Inflorescence paniculate, 1¾–5 in. long. Corolla 2-lipped, about ½ in. long; upper lip white, with red stripes; lower lip greenish-white. See *Compt. Rend. Soc. Bot. Belg.* xxxviii. 102. Congo. (Laeken Col. G., Brussels.)

Echinocactus arizonicus. (*M. K.* 1909, 149, f.) Cactaceae. G. Stem at first globose, later depressed-globose, up to 1 ft. high. Ribs 21, obtuse, interrupted. Areolae up to 1¼ in. long and nearly ½ in. broad, ¾ in. apart. Radial spines 3, about 1 in. long; central 4, 1¼-2 in. long, the lowermost hook-like. Flowers 2-2½ in. across, purple. Arizona. (H. Frank, Frankfort-on-the-Main, Germany.)

Echinocereus De Laetii. (*M. K.* 1909, 131, 158.) Cactaceae. G. Tufted, the growths completely enveloped in long hair-like bristles. Ribs 17–20, deeply sinuate. Areolae oblong. Radial spines 30–36, rigid, tawny-whitish, the upper shorter than the lower; central 4 or 5, reddish, the lowermost longest, curved. Bristles 5 or 6, very long. Flowers rose. It resembles *Cephalocereus senilis*, but differs chiefly in the presence of radial spines and in having only 5 or 6 bristles to each areola. Mexico. (F. De Laet, Contich, Belgium.) [Syn. *Cephalocereus De Laetii*; M. K. 1909, 116, f. 129.]

Elsholtzia Stauntoni. (*M. D. G.* 1909, 288.) Labiatae. H. Shrubby at the base from which several annual shoots 3–5 ft. high are produced. Leaves broadly lanceolate, acuminate, rather coarsely toothed, glabrous above, whitish and thickly covered with golden dots beneath, aromatic, as well as the flowers. Panicle terminal, up to 12 in. long. Flowers purple-red, about ⅛ in. long, clothed with small purple-rose hairs. N. China. (Arnold Arboretum.)

***Encephalartos Barteri.** (*B. M.* t. 8232.) Cycadaceae. S. Stem short, rarely more than 1 ft. high, up to 9 in. across. Leaves erect or suberect, 3½–5½ ft. long, 9–10 in. broad towards the apex; petiole and rhachis clothed at first with a deciduous grey tomentum; leaflets usually about 80 pairs, rather close-set, linear-lanceolate, ½–¾ in. broad, pungent at the apex, few-toothed. Male cone narrowly cylindric, 5–9 in. long, pale. Female cone oblong-ellipsoid, 8 in. long, dark olive. Seeds 1¼ in. long; testa crimson. W. Trop. Africa. (Kew.)

Ennealophus amazonicus. (*K. B.* 1909, 361.) Iridaceae. G. Bulb about 1 in. long, ovoid. Stem 16–18 in. high, simple, glabrous. Leaves 4, linear-lanceolate, 6–12 (the uppermost 2) in. long. Spathe-bracts 2, ¾ in. long, surrounding about 6 flowers. Pedicels 1–1½ in. long, slender. Perianth about 1½ in. across, blue-violet, with pale brown claws to the segments, the inner of which have a triangular white blotch at the base of the blade. The genus is new and differs from *Tigridia* in having the style-branches 3-crested instead of bifid or subulate. The species resembles *T. violacea*. Brazil. (H. A. Tracy.)

Epicattleya Wolteriana. (*G. C.* 1909, xlv. 274.) Orchidaceae. G. A garden hybrid between *Epidendrum aurantiacum* and *Cattleya Schroederae*. (P. Wolter, Magdeburg, Germany.)

Epilaelia Lionetii. (*G. C.* 1909, xlv. 270; *G. M.* 1909, 332.) Orchidaceae. G. A garden hybrid between *Laelia purpurata* and *Epidendrum atropurpureum*. (Charlesworth & Co.)

***Eranthemum Wattii.** (*B. M.* t. 8239.) Acanthaceae. S. The correct name for the plant included in the list of 1901 as *Daedalacanthus Watti*, also in cultivation as *D. parvus.*

Eremospatha Haullevilleana. (*R. H. B.* 1909, 378.) Palmae. S. A slender climbing plant. Leaves pinnate, about 2 ft. long, obliquely truncate at the apex; rhachis prolonged into a whip-like prickly appendage; leaflets 8 or 9 each side, obovate, 4–9 in. long, prickly on the margin. See *Ann. Mus. Congo*, Bot. ser. 5, i. 96, tt. 33–34. Congo. (Brussels B. G.)

Eremurus robustus albus. (*Veitch Herb. P. Nov.* 1909–10, 1.) Liliaceae. H. Described as a great improvement on the variety *himalaicus*, being stronger in growth and having purer white flowers. (J. Veitch & Sons.)

Eria eriaeoides. (*O. R.* 1909, 95.) Orchidaceae. G. Stems numerous, finger-like, 2–4 in. long, 1- or 2-leaved. Leaves lanceolate, about 5 in. long and 1 in. broad, narrowed into rather a long petiole. Racemes lateral, erect, 2–3 in. long, hoary, bearing 6 to 9 small hoary dingy-purplish sessile or nearly sessile flowers. Queensland. (Kew.) [Syn. *Dendrobium eriaeoides*, F. M. Bailey.]

***Eria ochracea.** (*K. B.* 1909, 366.) S. Pseudobulbs cylindric, 4–7 in. long, 3–5-leaved at the apex. Leaves oblong or lanceolate-oblong, 3¾–7 in. long, 1–1¾ in. broad. Scapes terminal, about 4 in. long. Flowers greenish-yellow, with a slight brownish suffusion and an indistinct brown line on the petals. Sepals 7½ lin. long. Petals 5 lin. long. Lip mobile, 3-lobed, recurved, 5 lin. long. Malaya, probably Siam. (Kew.)

Erigeron speciosus grandiflorus. (*Veitch Herb. P. Nov.* 1909–10, 1.) Compositae. H. Flowers larger and deeper in colour than those of the variety *superbus.* (J. Veitch & Sons.)

***Erlangea tomentosa.** (*B. M.* t. 8269; *G. C.* 1909, xlvi. 97.) Compositae. G. A densely villous-tomentose shrub, up to 5 ft. high. Leaves oblong or oblong-lanceolate, 2–5 in. long, ¾–1¾ in. broad, doubly serrate; petioles 1–1¼ in. long. Panicles corymbose, lax, pedunculate, about 6 in. across. Flower-heads lilac, about ⅔ in. across. Florets all tubular, ¼ in. long. Trop. E. Africa. (Kew.)

***Erythea Brandegeei.** (*S. C. A. A. Cat.* 1908, 2, as *E. Brandegei.*) Palmae. S. "Tallest-growing of all fan-leaved palms and most ornamental." See *Gfl.* 1903, 11. Lower California. (Southern California Acclimatizing Association.)

***Erythea elegans.** (*S. C. A. A. Cat.* 1908, 2.) S. Dwarfest of the known species of the genus. Leaves thin, with a blue tinge. Peduncles feathery. Fruits yellowish, covered with a waxy coat. Mexico. (Southern California Acclimatizing Association.)

Eucalyptus leucoxylon purpurea. (*R. H.* 1909, 216.) Myrtaceae. G. Differs from the type in having bright purple flowers. See *R. H.* 1901, 500. (Villa Valetta, Cannes.)

***Euonymus macropterus.** (*I. S. H. T.* vi. t. 233.) Celastraceae. H. Branches glabrous. Leaves petiolate, oblong or obovate, acute, cuneate at the base, serrulate. Inflorescences axillary, many-flowered; peduncle elongated, slender. Flowers whitish. Sepals 4. Petals 4, ovate. Fruit with 4 ascending wings longer than the cells. Amur Region. (L. van den Bossche, Tirlemont, Belgium.)

***Euphorbia Ledienii.** (*B. M.* t. 8275.) Euphorbiaceae. S. A succulent branched shrub, 3 ft. high or more, soon leafless, glabrous. Branches sharply 5-7-angled, 1½–3 in. thick; grooves between the angles rounded-concave. Spines in pairs, divergent, 2–4 lin. long, the pairs ⅛–¾ in. apart. Cymes each bearing 3 involucres, usually several in each axil, on stalks about 1 lin. long. Involucres 1½–2 lin. long, truncate, glabrous, yellow; lobes fimbriately toothed. This species has long been in cultivation without a name or under the erroneous name of *E. virosa.* S. Africa. (Kew.)

Euphorbia Sapinii. (*G. C.* 1909, xlv. 66, f. 37.) S. Resembles *E. bupleurifolia.* Stem thick, fleshy, covered, especially on the youngest part, with swollen mammillate tubercles; tubercles green when young, each with a hard stipular spine which falls off in about the third year. Leaves in an apical tuft, fleshy, 9–12 in. long, ½–¾ in. broad, broadest in the upper part, keeled. Flowers very small, on very short axillary peduncles. Congo. (Brussels B. G.)

***Exochorda Giraldii.** (*M. D. G.* 1908, 136, 191, 219; 1909, 295, f; *Hesse Cat.* 1909–10, 113, f.) Rosaceae. H. Young shoots bright rose. Leaves rounded or obovate, rose-red at the tips, and on the nerves and petioles. Racemes terminal, rather erect, long, lax, 6–8-flowered. Flower-buds rose

or cherry-red. Expanded flowers, white, 2½ in. across. N. China. (H. A. Hesse, Weener, Hanover.)

*Exochorda macrantha. (*M. D. G.* 1908, 191.) H. A garden hybrid between *E. grandiflora* and *E. Alberti*. (C. F. Niemetz, Temesvár, Hungary.)

*Exostemma subcordatum. (*B. M.* t. 8274.) Rubiaceae. S. Shrub 3–10 ft. high, with slender terete branches. Leaves ovate or ovate-lanceolate, 2–3 in. long, 1–1½ in. broad, acuminate, subcordate at the base; petioles very short. Inflorescence terminal, leafy, subcorymbose. Corolla white, fragrant; tube narrowly cylindric, ½–¾ in. long; lobes linear, about 1 in. long, 1 lin. broad. Stamens long-exserted. West Indies. (Kew.)

*Fothergilla monticola. (*M. D. G.* 1909, 295; *Hesse Cat.* 1909–10, 116, as *F. montana*.) Hamamelidaceae. H. Described as differing from *F. major* in having a more pendulous habit of growth and larger leaves. Shoots red-brown, tomentose. Leaves round-oval, up to 5 in. long and broad, acuminate, coarsely crenate, shining dark green above, light green beneath, not hoary. N. America. (H. A. Hesse, Weener, Hanover.) [*F. major*, Lodd.]

*Gentiana corymbifera. (*G. C.* 1909, xlvi. 203, f. 86.) Gentianaceae. H. H. Stems 12–18 in. high, usually simple below. Leaves mostly in a basal tuft, strap-shaped, about 4 in. long. Flowers white, ¾–1½ in. across, in a terminal corymb or panicle. New Zealand. (Kew.)

*Gentiana Freyniana. (*G. C.* 1909, xlvi. 203, f. 85; *K. B.* 1909, 343.) H. Similar to *G. septemfida* from which it chiefly differs in having much larger flowers, which are more inflated towards the mouth, and have a less prominent fringed crest between the larger segments of the corolla. Asia Minor. (Kew.)

Gentiana Veitchiorum. (*G. C.* 1909, xlvi. 178, f. 74; *Gard.* 1909, 479, 483, f.) H. A new species in cultivation under the erroneous name of *G. ornata*. It differs from the true *G. ornata*, Wallich, in being a more robust plant, with relatively broad obtuse leaves, and larger flowers, with broader corolla-lobes having very broad toothed folds between them. Flowers intense blue, with light longitudinal bands on the outside. W. China. (J. Veitch & Sons.) [Syn. *G. ornata*; G. C. 1909, xlvi. 173; G. M. 1909, 706, not of Wallich.]

*Geranium Fremontii. (*G. C.* 1909, xlvi. 212.) Geraniaceae. H. Stems 1–1½ ft. high. Leaves soft, light green above, paler beneath, prettily veined. Flowers purple-lilac, dark-veined, about 1¼ in. across. N. America. (S. Arnott.)

Habenaria Regnieri. (*R. H.* 1909, 518.) Orchidaceae. S. A garden hybrid between *H. militaris* and *H. carnea*. (A. Régnier, Fontenay-sous-Bois, Seine, France.)

Habranthus rutilus atroroseus. (*Gfl.* 1909, 310.) Amaryllidaceae. G. Scape robust, about 8 in. high, bearing about 9 deep rose-carmine flowers which open in succession. (M. Herb, Naples.) [*Hippeastrum*.]

Haemanthus Lambeauianus. (*R. H. B.* 1909, 96.) Amaryllidaceae. S. A garden hybrid between *H. Hellepputteanus* and *H. amabilis*. (F. Lambeau, Brussels.)

Heliopsis scabra gratissima. (*Lemoine Cat.* 1909, n. 173, iv.) Compositae. H. Plant about 3 ft. high. Flower-heads very large, with 4 or 5 series of very broad reflexed and convex ligulate florets of a brilliant pale yellow colour. (V. Lemoine & Son, Nancy.)

Heliopsis scabra imbricata. (*Lemoine Cat.* 1909, n. 173, iv.) H. Plant less tall. Flower-heads 3½ in. across, very double; ligulate florets rounded, imbricate, golden-yellow. (V. Lemoine & Son, Nancy.)

Heliopsis scabra zinniaeflora. (*Lemoine Cat.* 1909, n. 173, iv.) H. Plant not exceeding 2 ft. high. Flower-heads 3–3½ in. across, almost quite double; ligulate florets reflexed, imbricate, golden-yellow. (V. Lemoine & Son, Nancy.)

Hemerocallis luteola major. (*R. H.* 1909, 60, col. t.) Liliaceae. H. A garden hybrid between *H. aurantiaca major* and *H. Thunbergii*. (V. Lemoine & Son, Nancy.)

Hemerocallis luteola pallens. (*R. H.* 1909, 60, col. t.) H. A garden hybrid between *H. citrina* and *H. Thunbergii*. (V. Lemoine & Son, Nancy.)

*Herbertia platensis. (*S. C. A. A. Cat.* 1908, 38.) Iridaceae. G. Leaves sword-shaped, light bluish-green. Flowers in tall spikes, a beautiful porcelain blue, produced during 8

months of the year. Uruguay. (Southern California Acclimatizing Association.)

Hormidium pseudopygmaeum. (*O. R.* 1909, 134.) Orchidaceae. S. Allied to *H. uniflorum* (*B. M.* t. 3233), but differs in having longer pseudobulbs, which are cylindric at the summit, rather larger leaves, and in having the flowers in a short spike. Flowers white, with a few red marks on the lip. Costa Rica. (W. Barbey, Pierrière, Geneva; Glasnevin B. G.)

***Humea elegans gigantea.** (*G. C.* 1909, xlvi. 50.) Compositae. G. Much taller than the type, attaining a height of 20 ft., with larger leaves and panicles. (Kew.)

Hydrangea cinerea forma **sterilis.** (*M. D. G.* 1908, 157.) Saxifragaceae. H. A form in which almost all the flowers are enlarged and sterile. Probably Ohio, U.S.A. (E. Y. Teas, Centerville, Indiana, U.S.A.)

***Hydrangea hortensis alba.** (*G. C.* 1909, xlv. 301; *G. M.* 1909, 371.) H. H. A pure white variety. (H. Low & Co.)

***Ilex crenata** forma **microphylla.** (*M. D. G.* 1908, 160.) Aquifoliaceae. H. Leaves only 4–6 lin. long and 1½–3 lin. broad, elliptic or narrowly elliptic, mucronate-acute, crenate-serrulate. Fruits 3–3½ lin. across. Japan. (Arnold Arboretum.)

***Ilex Sieboldii.** (*M. D. G.* 1908, 137.) H. An attractive shrub, with small oval serrulate leaves and coral-red fruits scarcely so large as a pea. There is a form with yellow fruits (*fructu luteo*) and another with white fruits (*leucocarpa* or *fructu albo*). Japan. (H. A. Hesse, Weener, Hanover.)

***Incarvillea grandiflora** var. **brevipes.** (*K. B.* 1909, 263.) Bignoniaceae. G. or H. H. Differs from the type in having the pedicels much shorter than the peduncle. S. W. China. (Bees, Ltd.) [Syn. *I. Bonvalotii*; G. C. 1909, xlv. 332, not of Bureau & Franchet.]

***Iris himalaica.** (*G. C.* 1909, xlv. 3, 36; xlvi. 15.) Iridaceae. H. Rhizome slender. Sheaths splitting into long fibres. Leaves linear, 2–3 ft. long, ¾ in. broad, drooping when full grown. Scape slender, 2 ft. high, bearing 3 heads of flowers. Spathes 2-flowered. Pedicels 3 in. long. Perianth-tube triangular, ½ in. long; standards spreading, lanceolate, with deeply channelled limb, 1½ in. long, ¾ in. broad, violet-blue, veined with a deeper shade; falls 2 in. long, 1 in. broad, obovate-cuneate, violet-blue, blotched with white and yellow at the throat. Himalaya. (W. R. Dykes.) [*I. Clarkii*, Baker.]

Iris reticulata atropurpurea. (*G. C.* 1909, xlv. 113.) H. Spathes veined and blotched with red-purple. Standards small, narrow, blackish-red. Falls with a uniform velvety black blade; haft furnished with a row of glistening black spines about $\frac{1}{16}$ in. high. Asia Minor. (W. R. Dykes.)

Juglans Allardiana. (*B. S. D. F.* 1909, 33, 34, ff.) Juglandaceae. H. Closely allied to *J. Sieboldiana* with which it has been confused. It differs chiefly in the nuts, which are blackish or ash-grey, and have usually only 4 less developed cavities. Japan. (G. Allard, Angers, France, etc.)

Juglans australis. (*B. S. D. F.* 1909, 169, 181, 212, ff.) H? Leaves very long; leaflets in 6–15 pairs, sessile, oval, about 7 in. long, rather abruptly acuminate, serrate, viscid, pubescent. Fruits small, ovoid, pubescent. Nuts small, ovoid, more or less acute, dull ash-grey, somewhat deeply striate; cavities 4–6, elongated; dissepiments not reaching to the middle. Argentina. (L. A. Dode, Paris, etc.)

Juglans cathayensis. (*B. S. D. F.* 1909, 44, 47, 169, ff.) H. Distinguished from *J. stenocarpa* by the usually blackish nuts which have more numerous and larger cavities. China. (M. L. de Vilmorin, Les Barres, France.)

Juglans coarctata. (*B. S. D. F.* 1909, 36, 38, 169, ff.) H. Leaves up to about 3 ft. long; leaflets in 4–8 pairs, 8 in. long, very acuminate, the sides somewhat parallel, slightly toothed, villous. Fruits ovate, villous, in long pendulous spikes. Nuts irregularly ovate, constricted about the middle, acute, winged at the summit only; dissepiments reaching to or exceeding the middle. Japan. (Arboretum Segrezianum, Seine & Oise, France.)

Juglans collapsa. (*B. S. D. F.* 1909, 45, 49, ff.) H. Differs from *J. Dracconis* in the nuts, which are longer, subcylindric, less rugose, obscurely ribbed, less acuminate, and are furnished with ovate depressions. This species is figured in *G. C.* 1888, iv. 384, f. 53, under the erroneous name of *J. mandshurica*. N. China.

Juglans Draconis. (*B. S. D. F.* 1909, 45, 49, ff.) H? Leaves and flowers scarcely different from those of *J. stenocarpa*. Fruits up to 2½ in. long, ovate-obovate, villous. Nuts globose-obovate, 8-ribbed, often strongly rugose, ash-grey, shortly acuminate; cavities 4; dissepiments exceeding the middle. S.W. China. (L. Späth, Berlin, etc.)

Juglans Lavallei. (*B. S. D. F.* 1909, 37, 38, 169, ff.) H. Similar in leaves and flowers to *J. coarctata*. Fruits subglobose-ovate, villous, 20 or more in long pendulous spikes. Nuts subglobose, somewhat compressed, ash-grey, somewhat winged at the apex, shortly acuminate; cavities 4; dissepiments not reaching to the middle. Japan. (Arboretum Segrezianum, Seine & Oise, France; Paris B. G., etc.)

Juglans ovoidea. (*B. S. D. F.* 1909, 174, 186, ff.) H. Very near *J. nigra* or perhaps a variety of *J. malosma*. Fruits ovate, 2½–3 in. long. Nuts ovate or oblong, usually moderately rugose, subcompressed. S. W. United States.

Juglans regia var. **corcyrensis.** (*M. D. G.* 1908, 153, 219.) H. Described as a very distinct and highly decorative variety. Corfu. (C. Sprenger, Naples.)

Juglans subcordiformis. (*B. S. D. F.* 1909, 39, 43, ff.) H. Closely allied to *J. cordiformis*. Fruits more or less compressed, villous. Nuts shortly cordate, compressed, ash-grey, somewhat strongly winged, shortly acuminate; cavities 4, narrow; dissepiments reaching to the middle. Japan. (G. Allard, Angers, France.)

Juglans Torreyi. (*B. S. D. F.* 1909, 169, 175, 194, ff.) H. Leaves with 5–10 pairs of narrow somewhat remotely serrate pubescent leaflets. Fruits subglobose, 1½–2 in. long, somewhat villous. Nuts more or less depressed, compressed, rather deeply striate; cavities 4, long; dissepiments reaching to the middle. This species has been confused with *J. rupestris*. S. United States. (G. Allard, Angers, France.)

Jussieua Sprengerii. (*B. T. O.* 1909, 263.) Onagraceae. H. H. An evergreen perennial prostrate herb, somewhat softly hairy, much branched. Stem cylindric and winged. Leaves opposite, crowded, oval, acute. Flowers very large, canary-yellow. Argentina. (C. Sprenger, Naples.)

Laelia Danielsi. (*R. H.* 1909, 518.) Orchidaceae. S. A garden hybrid between *L. Perrinii* and *L. Schilleriana*. (Ch. Béranek, Paris.)

Laelia gattonensis. (*G. C.* 1909, xlvi. 61.) S. A garden hybrid between *L. anceps Dawsonii* and *L. cinnabrosa*. (Sir J. Colman.)

Laelio-cattlya Dayana. (*O. R.* 1909, 315.) Orchidaceae. G. A garden hybrid between *Cattleya velutina* and *Laelia crispa*. (H. S. Goodson.)

Laelio-cattleya wintonensis. (*O. R.* 1909, 374.) G. A garden hybrid between *Cattleya Harrisoniana* and *Laelio-cattleya Mylamiana*. (J. S. Moss.)

Larix leptolepis prostrata. (*M. D. G.* 1909, 252, 327.) Coniferae. H. A prostrate form. (F. Kneiff, Nordhausen, Germany.)

Laurelia serrata. (*B. M.* t. 8279.) Monimiaceae. H. or H. H. Tree reaching a height of 70 ft., with foetid wood. Leaves opposite, broadly oblong-lanceolate or lanceolate, 2–5-in. long, ¾–1¾ in. broad, serrate, aromatic, leathery; petiole 2-4 lin. long. Inflorescences axillary, 3–9-flowered; pedicels 1–2 lin. long. Flowers all male or the terminal only male and the rest hermaphrodite or some of them female. Perianth-segments 8, oblong-elliptic, greenish-yellow, about 1½ lin. long. Native name: Huanhuan. Chile. (This has long been cultivated at Kilmacurragh, Wicklow, under the erroneous name of *L. aromatica*. See *G. C.* 1904, xxxvi. 401, f. 172.)

Leptodermis oblonga. (*M. D. G.* 1909, 288.) Rubiaceae. H. A small shrub with slender branches. Leaves oblong, about ¾ in. long, glabrous. Flowers dark violet, tubular, about ⅔ in. long, in small terminal clusters. N. China. (Arnold Arboretum.)

Leucanthemum vomerense. (*J. S. H. F.* 1909, 432.) Compositae. H. Plant about 4 ft. high, very floriferous. Flower-heads very large, the white ray-florets being 2–2½ in. long. (Vilmorin-Andrieux & Co., Paris.)

Linaria globosa. (*G. M.* 1909, 988.) Scrophulariaceae. H. The plant forms close rounded masses of pretty glaucous green leaves and produces numerous very small lilac flowers. Country not stated. (S. Arnott.) [Probably a garden form of some common species.]

Liparis Caillei. (*B. S. B. F.* 1909, 97, t. 1, ff. 1–13.) Orchidaceae. S. A dwarf tufted epiphytic herb. Pseudobulbs ovate, flattened, 6–8 lin. long, 2-leaved at the apex. Leaves membranous, ovate, 8 lin. long, 2½ lin. broad, 5-nerved. Scape 4-winged. Raceme 7–9 in. long, several-flowered. Flowers 7 lin. broad, the lower 2 or 3 abortive. The species is characterized by the short membranous not plicate leaves, and the length of the 4-winged scape. French Guinea. (Paris B. G.)

Listrostachys dactyloceras. (*R. H.* 1909, 142.) Orchidaceae. S. A small plant only about 3 in. high. Stems stout, 3- or 4-leaved. Leaves sword-shaped, very fleshy, 1½ in. long. Racemes capitate. Flowers white. Sepals and petals 1½–1⅔ lin. long. Lip 2½ lin. long. Spur about 1⅓ in. long. See *Dyer*, *Fl. Trop. Afr.* vii. 168. W. Trop. Africa. (Paris B. G.)

***Livistona Mariae.** (*S. C. A. A. Cat.* 1908, 3.) Palmae. S. Leaves similar in shape to those of *L. australis*, the blade and petiole when young being coloured a beautiful copper-red. See *G. C.* 1887, i. 676, 734. Central S. Australia. (Southern California Acclimatizing Association.)

Lomaria costaricensis. (*Lemoine Cat.* 1909, n. 173, 3.) Filices. G. Stem thick, short, covered as well as the bases of the stalks of the fronds with long bronze-coloured silky hairs. Fronds arched, 24–28 in. long; pinnae alternate, acuminate, undulate, coriaceous, clear green. Mountains of Costa Rica. (V. Lemoine & Son, Nancy.)

***Lomatia obliqua.** (*G. C.* 1909, xlv. 162.) Proteaceae. H. or H. H. A shrub or tree, with erect densely leafy branches. Leaves ovate, up to 4 in. long and 2½ in. broad, sometimes only about 1 in. long and ⅔ in. broad, leathery, smooth, bright green, crenate; petioles brown. Flowers about ⅛ in. long, in axillary racemes shorter than the leaves, white, covered with ferruginous hairs. Chili. (Kew.)

Lonicera amoena var. **Arnoldiana.** (*M. D. G.* 1908, 163.) Caprifoliaceae. H. Differs from the type in having smaller and narrower acute leaves cuneate at the base. *L. amoena* is a garden hybrid between *L. Korolkowii* var. *floribunda* and *L. tatarica*. The variety is a hybrid between typical *L. Korolkowii* and *L. tatarica*. (Arnold Arboretum.)

Lonicera arizonica. (*Sargent, T. & S.* i. 45, t. 23; *Späth Cat.* 1909–10, 98.) H. A low bushy or sarmentose shrub. Leaves ovate or sometimes oval, ¾–2 in. long, obtuse, truncate or broadly cuneate at the base, bright green above, glaucous beneath, ciliate; petiole ¼–½ in. long. Flowers in terminal pedunculate 1–3-whorled heads. Corolla narrowly tubular-funnel-shaped, 1½–2 in. long, yellow, more or less tinged with scarlet outside; limb short, 5-lobed. Mountains of Arizona. (L. Späth, Berlin.)

Lonicera Ferdinandii Beissneriana. (*M. D. G.* 1908, 189.) H. A form in which the leaves of the radical shoots are up to 8 in. long and 2 in. broad below the middle, ovate or slightly cordate at the base, narrowed above, sharply acute; leaves of the flowering-branches scarcely half so large. Ripe fruits breaking through the involucre, red, succulent. Shensi, China. (L. Beissner, Bonn, Germany.)

Lycaste formosa. (*G. C.* 1909, xlvi. 99.) Orchidaceae. G. A hybrid of unrecorded parentage. Flowers large, cream-white, with red spots at the base of the petals. (F. Sander & Sons.)

Lycaste Skinneri var. **hellemmensis.** (*J. S. H. F.* 1909, 179; *R. H. B.* 1909, 53, col. t.) G. Flowers nearly 6 in. across. Sepals and petals bright rose-purple, darker towards the base. Lip blackish-purple at the base, yellowish-white with large purple dots towards the apex of the lobes. (O. Fanyau, Hellemmes-Lille, France; Th. Pauwels, Meirelbeke, Belgium.)

Mahonia Aquifolium. (*M. D. G.* 1908, 216, 219.) Berberidaceae. H. The following forms having variously coloured leaves are described: *albovariegata*, *amabilis*, *aucubifolia*, *aureovariegata* and *lutescens*. (Fritz Graf v. Schwerin, Wendisch-Wilmersdorf, Germany.) [*Berberis.*]

Malus floribunda var. **Arnoldiana.** (*R. H.* 1909, 51.) Rosaceae. H. Flowers pale rose, much larger than those of the type. Fruits also much larger. (Arnold Arboretum.) [*Pyrus.*]

Mammillaria ceratites. (*M. K.* 1909, 155, f.) Cactaceae. G. Stem simple, ovoid, about 2½ in. high and 2 in. thick, greyish-green. Tubercles subrhomboid, very oblique, later corky and imbricate, woolly in the axils. Areolae circular, scarcely ¼ inch across, sparingly clothed with white wool which soon disappears. Radial spines usually 15, up to 7½ lin. long, subulate, straight,

white; central 5 or 6, up to 1¼ in. long, stouter, black above. Flowers carmine. Mexico. (F. De Laet, Contich, Belgium.)

Mammillaria crucigera. (*M. K.* 1909, 190.) G. Stem cylindric or ovoid, 6 in. high or more. Tubercles conical, 2–3 lin. long, fresh green, with abundant white wool in their axils, and at their summit 4 small yellowish spines arranged crosswise, with a small tuft of white bristles about as long. Flowers a beautiful purple. Perianth-segments lanceolate, acute. Style 5-lobed. Re-introduced. In cultivation in 1832. Mexico. (Haage & Schmidt, Erfurt, Germany.)

***Mammillaria lasiandra denudata.** (*M. K.* 1909, 79, 174.) G. Growths in groups of several heads. Stem mushroom-shaped, the older part woody and forming a round stalk. Tubercles grass-green, cylindric at first, later broadened at the base, 4 in. long, ½ in. thick; axils naked. Areolae circular, furnished with a little quickly disappearing wool. Radial spines up to 40, up to 2½ lin. long; central none. Flowers 7½ lin. long. Outer perianth-segments 5 or 6, green, acute; inner about 16, spathulate, white, with a red median stripe. Mexico. (Haage & Schmidt, Erfurt, Germany.)

Mammillaria pseudoperbella. (*M. K.* 1909, 188, f.) G. Plant forked, the divisions at first nearly globose, later more cylindric, depressed at the summit which is clothed with snow-white wool and protected by spines. Tubercles cylindric, about ¼ in. long, obliquely truncate. Radial spines 20–30, bristle-like, very short; central 2, up to nearly ½ in. long. Flowers apparently solitary. Fruits small, deep red. Mexico. (L. Quehl, Halle-on-the-Saale, Germany.)

Mammillaria strobiliformis var. **caespititia.** (*M. K.* 1909, 173.) G. Differs chiefly from the typical form in its tufted habit of growth. (Haage & Schmidt, Erfurt, Germany.)

***Megaclinium purpureorachis.** (*G. C.* 1909, xlv. 293, f. 126; *O. R.* 1909, 155; *B. M.* t. 8273.) Orchidaceae. S. Pseudobulbs elliptic-oblong, 2½–3 in. long, 2-leaved. Leaves oblong or elliptic-oblong, 8–12 in. long, 1½–2 in. broad. Inflorescence very stout, more than 1 ft. high. Rhachis much dilated, undulate, about 7 in. long, 1½ in. broad, light yellowish-green, heavily blotched with dark red - purple. Flowers about ½ in. apart on each side of the rhachis, very hairy, dark brown, concealed in the bud-stage by curiously formed bracts, which become reflexed as the flowers successively approach maturity. Congo. (Sir Trevor Lawrence.)

Menziesia pentandra. (*M. D. G.* 1909, 287.) Ericaceae. H. A slender shrub about 3 ft. high, with elliptic-lanceolate hairy leaves 1–1¾ in. long, and urn-shaped greenish-white pendulous flowers about ⅓ in. long. Japan. (Arnold Arboretum.)

Micholitzia obcordata. (*K. B.* 1909, 358.) Asclepiadaceae. S. The genus is new and is related to *Marsdenia*. *M. cordata*, the only species known, is of no horticultural value. It is a small undershrub with milky juice, obcordate or obovate leaves up to 1⅓ in. long, and a corolla about ¼ in. long, with olive-green tube and reddish lobes. India. (Glasnevin B. G.)

Miltonia vexillaria stellata. (*R. H. B.* 1909, 190.) Orchidaceae. S. Flowers striped with rose. (F. Lambeau, Brussels.)

Miltonioda Harwoodii. (*G. C.* 1909, xlvi. 27; *O. R.* 1909, 233, f. 18; *J. of H.* 1909, lix. 51, f.) Orchidaceae. G. A garden hybrid between *Miltonia vexillaria* and *Cochlioda Noetzliana*. (Charlesworth & Co.)

Miltonioda Lindeni. (*O. R.* 1909, 57.) G. A garden hybrid of which the parents are probably *Cochlioda vulcanica* and *Miltonia Phalaenopsis*. (L. Linden, Brussels.)

Miltoniopsis Pauwelsiana. (*R. H. B.* 1909, 60; *G. C.* 1909, xlv. 142.) Orchidaceae. S. A garden hybrid between *Miltonia Roezlii* and *M. vexillaria Leopoldii*. (Th. Pauwels, Meirelbeke, Belgium.) [*Miltonia*.]

Monomeria barbata. (*G. C.* 1909, xlvi. 405.) Orchidaceae. G. Similar in growth to a *Bulbophyllum*. Scape stout, about 1 ft. long, green, spotted with purple. Flowers about 1¼ in. long, greenish, marked with red-brown. Upper sepal ovate-acuminate, resting on the column; lateral sepals longer and broader, hairy, curiously folded over each other at the tips which are greenish-white. Petals small, fringed. Lip hinged on the upturned end of the column. Sikkim Himalaya. (Glasnevin B. G.)

***Mormodes revolutum.** (*K. B.* 1909. 367.) Orchidaceae. S. Near *M. speciosa*. Pseudobulbs fusiform-ob-

long, 4½–5¼ in. long. Leaves elongate-lanceolate, 6–12 in. long, 1¼–1½ in. broad, 3–5-nerved. Scapes axillary, about 4 in. long, 4–6-flowered. Sepals and petals oblong-lanceolate, 1½ in. long, deep buff-yellow. Lip oblong, 1½ in. long, reddish-brown, acute and reflexed at the apex. Peru. (F. Sander & Sons, Kew.)

Mussaenda Sanderiana. (*G. C.* 1909, xlvi. 34.) Rubiaceae. S. A compact-growing shrub 5–6 ft. high, or prostrate with branches 10–15 ft. long, silky-tomentose. Leaves subsessile, lanceolate, 3½ in. long, 1 in. broad, acuminate, cordate at the base, densely tomentose on both sides. Flowers sessile, yellow, silky, in terminal cymes. Petaloid sepal white, ovate, 3½ in. long, 1½ in. broad, on a stalk 1 in. long. Corolla 1 in. long. Indo-China. (Singapore B. G.)

***Mussaenda Treutleri.** (*B. M.* t. 8254.) S. The correct name for the plant introduced about 1840 and figured in *Bot. Reg.* xxxii. t. 24, as *M. macrophylla*, Wall. from the type of which it differs in having a more scattered rougher pubescence, larger leaves, broader stipules, more herbaceous sepals, etc. India. (Kew.)

***Nemesia lilacina.** (*K. B.* 1909, 376.) Scrophulariaceae. H. H. Annual herb 8–15 in. high, profusely branched, minutely glandular-pubescent. Leaves narrowly lanceolate, ¾–1½ in. long, 2–3 lin. broad, toothed. Racemes 4–11 in. long, lax. Pedicels slender, up to ½ in. long. Corolla small; upper lip scarcely ⅛ in. long, lilac, with dark purple stripes; lower lip about ⅛ in. long, purple-lilac, with a yellow blotch on the palate; spur whitish. German S.W. Africa. (Haage & Schmidt, Erfurt, Germany.)

Nepenthes grandis. (*J. S. H. F.* 1909, 595; *R. H.* 1909, 534.) Nepentheacae. S. A garden hybrid between *N. Curtisii superba* and *N. Northiana pulchra*. See *G. C.* 1909, xlvi. 393. (R. Jarry-Desloges, Paris.)

Nepenthes remilliensis. (*J. S. H. F.* 1909, 595; *R. H.* 1909, 534; *G. C.* 1909, xlvi. 393, as *N. remillyensis*.) S. A garden hybrid between *N. Curtisii superba* and *N. Northiana pulchra*. (R. Jarry-Desloges, Paris.)

Nephrolepis exaltata var. **Marshallii.** (*G. C.* 1909, xlvi. 331; *G. M.* 1909, 905, f.) Filices. S. A sport from the variety *Amerpohlii*. It is stoloniferous, with much more finely divided more densely plumose and broader fronds than any other plumose variety of the species. (H. B. May & Sons.)

Nephrolepis lycopodioides. (*G. C.* 1909, xlv. 301; *G. M.* 1909, 363, f.) S. Fronds densely plumose and moss-like, rather small. (T. Rochford & Sons.)

Nephrolepis magnifica. (*G. C.* 1909, xlvi. 26; *G. M.* 1909, 539, 558, f.) S. A variety of *N. exaltata* resembling var. *Amerpholii*, but the fronds are more finely cut. (Stuart Low & Co.)

Nephrolepis ornata. (*R. H. B.* 1909, 222.) S. Very distinct and compact in habit. (Dervaes frères, Wetteren, Belgium.)

Nephrolepis Schoelzeli. (*R. H.* 1909, 201; *Gfl.* 1909, 198.) S. Derived from the Boston Fern, a variety of *N. exaltata*. Its fronds are very plumose. (H. A. Dreer, Philadelphia, U.S.A.; O. Bernstiel, Bornstedt, Potsdam, Germany.)

Nephrolepis splendens. (*G. C.* 1909, xlvi. 363; *G. M.* 1909, 947.) S. Plant about 2½ ft. high and the same across. Fronds 18–24 in. long, 5 in. broad, deep green, very elegant, with large overlapping pinnae. Stated to be a hybrid between *N. Bausei*, a variety of *N. pluma*, and *N. recurvata*, the name given to a chance sporeling. (H. B. May & Sons.)

***Nephrolepis superba.** (*R. H. B.* 1909, 222.) S. Fronds very undulated. (Dervaes frères, Wetteren, Belgium.)

Oberonia umbraticola. (*K. B.* 1909, 62.) Orchidaceae. S. A stemless herb, 2–2½ in. high. Leaves ensiform, 1¼–3¼ in. long, ⅓–½ in. broad. Scape slightly longer than the leaves. Spikes cylindric, densely flowered, 1¼-2 in. long. Flowers minute, orange. Siam. (Trinity Coll. B. G., Dublin.)

***Octomeria arcuata.** (*K. B.* 1909, 61.) Orchidaceae. S. A tufted herb, 3–5 in. high. Stems rather slender, clothed with membranous sheaths. Leaves subsessile, lanceolate, 2½-3¾ in. long, 5–8 lin. broad. Flowers solitary, subpendulous, scarcely ½ in. long, light yellow, with the keels and side-lobes of the lip and the column red-purple. Sepals and petals oblong. Lip 3-lobed, 3½ lin. long, recurved. Brazil. (Kew.)

Octomeria Oppenheimii. (*Orch.* 1909, 9.) S. Stem slender, about 2 in.

long, bearing 5 loose membranous sheaths, 1-leaved. Leaves ovate-lanceolate, 2½ in. long, ⅝ in. broad. Flowers small, white, somewhat nodding. Sepals lanceolate, 4½–5 lin. long, the lateral connate at the base. Petals 4½ lin. long. Lip 2½ lin. long, 1½ lin. broad. Brazil. (P. Oppenheim, Gross-Lichterfelde, Berlin.)

Odontioda chelseiensis. (*G. C.* 1909, xlv. 347, f. 153; *G. M.* 1909, 70, f.; *O. R.* 1909, 48, f. 5.) Orchidaceae. G. A garden hybrid between *Cochlioda vulcanica grandiflora* and *Odontoglossum crispum.* (W. Bull & Sons.)

Odontioda Cooksoniae. (*G. C.* 1909, xlv. 347.) G. A garden hybrid between *Cochlioda Noetzliana* and *Odontoglossum ardentissimum.* (N. C. Cookson's Exors.)

Odontioda eboriacum. (*O. R.* 1909, 154.) G. A hybrid of unknown parentage. Its flowers are of medium size, with scarlet sepals and petals, and scarlet lip with pale yellow markings. (J. H. Craven.)

Odontioda gattonensis. (*G. C.* 1909, xlv. 17.) G. A garden hybrid between *Odontoglossum Kegeljanii* and *Cochlioda Noetzliana.* (Sir J. Colman.)

Odontioda Goodsoniae. (*G. C.* 1909, xlv. 174, 194, f. 83.) G. A garden hybrid probably between *Cochlioda Noetzliana* and *Odontoglossum ardentissimum album.* (H. S. Goodson.)

Odontioda Graireana. (*O. R.* 1909, 315; *G. C.* 1909, xlvi. 174, as *O. Grairiana.*) G. A garden hybrid between *Odontoglossum Rossii majus* and *Cochlioda Noetzliana.* (H. Graire, Amiens, France.)

Odontioda Hyeanae. (*T. H.* 1909, 270.) G. A garden hybrid between *Cochlioda Noetzliana* and *Odontoglossum ardentissimum.* (J. Hye.)

Odontioda Lambeauiana. (*T. H.* 1909, 332.) G. A garden hybrid between *Odontoglossum Lambeauianum* and *Cochlioda Noetzliana.* (F. Lambeau, Brussels.)

Odontioda Lutetia. (*G. C.* 1909, xlv. 141.) G. A garden hybrid between *Odontoglossum luteopurpureum* and *Cochlioda Noetzliana.* (Charlesworth & Co.)

Odontoglossum Armstrongiae. (*G. C.* 1909, xlv. 347.) Orchidaceae. G. A garden hybrid of unrecorded parentage. (Armstrong & Brown.)

Odontoglossum Arnoldii. (*G. C.* 1909, xlv. 239.) G. A garden hybrid of unrecorded parentage. (J. G. Fowler.)

Odontoglossum crispum maximum. (*R. H. B.* 1909, 190.) G. Flowers very large and finely shaped. (F. Lambeau, Brussels.)

Odontoglossum distans. (*O. R.* 1909, 334.) G. Resembles *Oncidium macranthum* in habit, but it has an erect loosely-branched panicle. Flowers ¾ in. across, with narrow light greenish-yellow sepals and petals, and a tinge of rose on the lip. Venezuela and Colombia. (Stuart Low & Co.)

Odontoglossum Goodsonii. (*G. C.* 1909, xlvi. 136; *J. of H.* 1909, lix. 243, f.; *O. R.* 1909, 280.) G. A garden hybrid between *O. Uroskinneri* and *O. Pescatorei Charlesworthii.* (H. S. Goodson.)

Odontoglossum moortebeekiense. (*O. R.* 1909, 315.) G. A garden hybrid between *O. Edwardii* and *O. cirrhosum.* (L. Linden, Brussels.) [*O. Fletcherianum.*]

Odontoglossum Pauwelsii. (*O. R.* 1909, 68.) G. A natural hybrid apparently between *O. Pescatorei* and *O. blandum.* Colombia. (Th. Pauwels, Meirelbeke, Ghent.)

Odontoglossum Stamfordianum. (*G. C.* 1909, xlvi. 237.) G. A garden hybrid between *O. bictoniense album* and *O. Uroskinneri.* (H. T. Pitt.)

Odontoglossum tripudians × Pescatorei Charlesworthii. (*Orch.* 1909, 10, f. 1.) G. A garden hybrid. (O. N. Witt, Berlin.)

Odontoglossum Wyonianum. (*G. C.* 1909, xlv. 174, 210, f. 89; *G. M.* 1909, 220.) G. A garden hybrid of unrecorded parentage. (J. G. Fowler.)

***Olearia myrsinoides** var. **erubescens.** (*G. C.* 1909, xlv. 213.) Compositae. H. or H. H. More vigorous than the type and more densely tomentose. Leaves larger, often 3 in. long. Flower-heads slightly larger, often tinged with light purple-red; ligulate florets fewer. E. Australia & Tasmania. (Kew.)

Oligobotrya Henryi. (*B. M.* t. 8238.) Liliaceae. H. A herb with a slender flexuous erect stem over 3 ft. high. Leaves sessile or shortly stalked, ovate-oblong or ovate, 4 in. long, 1½–2 in. broad. Racemes terminal, elongated,

simple or branching. Perianth white or pale yellow; tube cylindric, ¼ in. long, ⅛ in. broad; lobes small, spreading, oblong-ovate. The genus is intermediate between *Smilacina* and *Polygonatum*. Central China. (J. Veitch & Sons.)

Oligobotrya Henryi var. **violacea.** (*B. M.* t. 8238.) H. Differs from the type in having the perianth-tube violet outside, with the lobes paler. Central China. (J. Veitch & Sons.)

Oncidium abortivum. (*G. C.* 1909, xlvi. 322, f. 141.) Orchidaceae. G. Remarkable in having the greater number of the flowers abortive. Perfect flowers scattered amongst the abortive ones in a slender panicle, pale yellow with chestnut-brown markings. Venezuela. (Sir F. Crisp.)

Oncidium anfractum. (*K. B.* 1909, 367.) Near *O. Reichenbachii* with which it has been confused. Pseudobulbs oblong, compressed, about 2 in. long, 1–1¼ in. thick. Leaves oblong or linear-oblong, 5–9 in. long, ¾–1¼ in. broad. Scapes rather slender, flexuose, paniculate, about 3 ft. long; branches short, sharply bent back. Flowers bright yellow, with dark brown bars on the sepals and petals and lighter brown blotches on the basal half of the lip. Sepals lanceolate, 5 lin. long. Petals similar but broader. Lip broadly fiddle-shaped, 7½ lin. long. Venezuela. (H. Low & Co.)

Oncidium Charlesworthii. (*G. C.* 1909, xlv. 348, 376, f. 166; *G. M.* 1909, 436, 439, f.) G. Probably a natural hybrid of *O. crispum*. Flowers large, with deep chestnut-brown sepals and petals marked with slight wavy transverse lines. Lip bright yellow at the base, blotched with brown in front, suggesting *O. Marshallianum*. (Charlesworth & Co.)

Oncidium hybridum. (*G. C.* 1909, xlvi. 439; *J. of H.* 1909, lix. 614.) G. A garden hybrid between *O. tigrinum* and *O. lamelligerum*. (Charlesworth & Co.)

***Onopordon Salteri.** (*Gn.* 1909, 434.) Compositae. H. Plant pyramidal in habit, about 5 ft. high, silvery shining. Lowest leaves widely spreading on the ground, incised, spiny; upper reduced. Flower-heads not described. Country not stated. (Versuchsfelde, Brandenburg, Germany.)

Opuntia santa-rita. (*S. M. C.* lii. 195, t. 15.) Cactaceae. H.? A very attractive species with reddish usually orbicular joints. Areolae with chestnut-brown bristles. Spines usually wanting, sometimes 1 or 2, ¾–1¾ in. long. Flowers very handsome, deep yellow, 2½–3 in. across. S.W. United States. (New York B. G., etc.) [Syn. *O. chlorotica santa-rita*, Griff. & Hare.]

Opuntia utahensis. (*M. K.* 1909, 133, f.) H. Branched, prostrate; joints ascending, elliptic or obovate, swollen, about 6 in. long, 3½ in. broad. Areolae circular, with yellowish white wool. Spines 1–4, rigid, up to 1¾ in. long, grey, brown at the apex. Flowers carmine, up to nearly 4 in. across; outer segments scale-like, fleshy, spinescent-acuminate; inner almost cordate, nearly 2 in. long, about 1¼ in. broad. Utah, U.S.A. (Darmstadt B. G.)

Oreodoxa borinquena. (*S. C. A. A. Cat.* 1908, 3.) Palmae. S. "Attains great size, with a slender ivory-white trunk and majestic crown of feathery leaves." Porto Rico. (Southern California Acclimatizing Association.)

***Ornithidium bicolor.** (*K. B.* 1909, 64.) Orchidaceae. S. Pseudobulbs tufted, ovoid, 2–3 in. long, 2-leaved at the base, 1-leaved at the apex. Leaves strap-shaped, 6–12 in. long, bowed. Flowering-stem elongate, clothed with spreading oblong leaves 3–4 in. long. Flowers axillary, subfasciculate, stalked, ½ in. long, bright yellow, with a crimson blotch on the front lobe of the lip. Colombia. (L. Linden & Co., Brussels; Kew.)

***Ourisia macrophylla.** (*G. C.* 1909, xlv. 390, f. 172; *Gard.* 1909, 435, f.) Scrophulariaceae. H. or H. H. Herb with a basal tuft of dark green leaves about 6 in. long. Flowering-stems several. Flowers stalked, borne in superposed whorls, white or white streaked with purple. New Zealand. (Bees, Ltd.; Edinburgh B. G.)

***Paeonia Veitchii.** (*G. C.* 1909, xlvi. f. 1; *Gard.* 1909, 539, 542, f.) Ranunculaceae. H. Stem about 2 ft. high, bearing 6 or 7 leaves. Leaves light green, shining, with 15 acute segments ½ in. broad; petiole of the lowest leaf 4–8 in. long. Flowers several to each stem, on a slender stalk, often nodding, 3¾ in. across, sometimes becoming quite flat, purplish-crimson. W. China. (J. Veitch & Sons.)

Palisota Pynaertii foliis variegatis. (*R. H. B.* 1909, 378, col. t.) Commelinaceae. S. Leaves variegated. (Brussels B. G.)

Paphiopedilum insigne var. **Lagerae.** (*O. R.* 1909, 40, f. 3.) Orchidaceae. G. Dorsal sepal dark reddish-brown in the centre, suffused with greenish-yellow towards the edges, with 4 or 5 rose-purple marks at the upper part of the blotch, pure white on the margin. Petals yellowish-green, heavily barred and veined with reddish-brown. (Lager & Hurrell, Summit, New Jersey, U.S.A.)

Paphiopedilum niveum var. **Gloria Mundi.** (*O. R.* 1909, 9, f. 1.) S. Flower pure white, with a few very minute purple dots on the petals. (E. D. Bostock.)

Parthenocissus tricuspidata aurata. (*M. D. G.* 1908, 216, 219.) Ampelidaceae. H. Leaves marbled with golden-yellow and green. (Fritz Graf v. Schwerin, Wendisch-Wilmersdorf, Germany.)

Passiflora adenophylla. (*I. S. H. T.* vi. t. 236.) Passifloraceae. G. Leaves glabrous, cordate at the base, 3-lobed almost to the middle, furnished with glands in the sinus; lobes oblong, subacute, apiculate; petiole 1–1½ in. long, furnished with sessile glands. Peduncle as long as or longer than the petiole. Flowers white. Sepals with a subulate appendage on the back near the apex. Petals narrower and shorter than the sepals. It has been suggested that this species is identical with *P. alba*, Link & Otto. Mexico. (L. van den Bossche, Tirlemont, Belgium.)

***Patrinia palmata.** (*G. C.* 1909, xlvi. 244, f. 109.) Valerianaceae. A spreading plant 6–12 in. high. Leaves nearly all radical, palmate. Flowers in corymbs, numerous, fragrant, golden-yellow. Japan. (Kew.)

***Pelargonium brevipetalum.** (*K. B.* 1909, 184.) Geraniaceae. G. Stem thick and fleshy, ovoid, rising 1¾–2 in. above the soil, 1¼ in. thick, shortly branched at the apex. Leaves in a loose rosette, bipinnately divided, 3½–8 in. long, 1½–4 in. broad, ovate-oblong in outline, thick and fleshy; pinnae 5 or 6 each side, unequally pinnatisect. Peduncles erect, 10 in. long, branched above. Sepals 3½ lin. long, the dorsal erect and the rest reflexed. Petals subequal, elliptic, pale yellow, shorter than the sepals. Cape Colony. (Kew.)

***Peliosanthes violacea** var. **Clarkei.** (*B. M.* t. 8276.) Haemodoraceae. S. Herb with a short rootstock. Leaves oblong-lanceolate, up to 1 ft. long, 2½ in. broad, acuminate, glabrous; petiole 5–12 in. long. Racemes about 6 in. long. Flowers solitary, rather broadly campanulate, 5 lin. across, dark purple. The type has deep violet flowers. Assam to Malay Peninsula. (Kew.)

Periploca sepium. (*M. D. G.* 1909, 287.) Asclepiadaceae. H. A dwarf climbing shrub. Leaves oval or lanceolate, acute, often up to 4 in. long, entire, glabrous, dark green and shining above, pale green beneath. Flowers similar to those of *P. graeca*, but the corolla-lobes instead of being spread out flat are curved or rolled backwards. N. China. (Arnold Arboretum.)

Phalaenopsis gigantea. (*G. C.* 1909, xlv. 306, f. 131.) Orchidaceae. S. Similar to *P. amabilis* and *P. violacea* in habit of growth, but the leaves are much larger and thicker and are very glossy. Flowers less showy than those of *P. amabilis*, whitish, with many dark brown spots. Borneo. (Buitenzorg B. G., Java.)

***Phellodendron Lavallei.** (*B. S. B. F.* 1908, 648.) Rutaceae. H. Differs from *P. japonicum*, under which name it is in cultivation, by the fruits often being only half as large, the inflorescence less woolly pubescent, and the trunk corky. It is separated from *P. amurense* by its leaflets being much less pubescent and less lanceolate. Japan. (Arboretum Segrezianum, Seine & Oise, France.)

Philadelphus brachybotrys. (*Hesse Cat.* 1909–10, 137.) Saxifragaceae. H. A distinct species with very large white fragrant flowers. China. (H. A. Hesse, Weener, Hanover.) [This is probably *P. pekinensis* var. *brachybotrys*, included in the list of 1904. That plant, however, is described as having small flowers.]

***Philadelphus sericanthus.** (*Hesse Cat.* 1909–10, 139.) H. Leaves oblong-lanceolate, long-acuminate, few-toothed, glabrous or nearly so, or in the axils of the nerves beneath densely white-hairy. Inflorescence 7–11-flowered, lax. Calyx and ovary thickly clothed with stiff adpressed grey hairs. Style somewhat shorter than the stamens. See *Gfl.* 1896, 561, and *M. D. G.* 1904, 84. Central China. (M. L. de Vilmorin, Les Barres, France; H. A. Hesse, Weener, Hanover.)

Picea excelsa acrocoma. (*Hesse Cat.* 1909–10, 247.) Coniferae. H. Cones bearing at the apex a tuft of hard short and broad sharply pointed needles. (H. A. Hesse, Weener, Hanover.)

Picea pungens tabuliformis. (*M. D. G.* 1909, 268, 327.) H. A flat-topped form resembling *P. pungens prostrata.* (Prince M. Lobkowitz, Eisenberg, Bohemia.)

Picea Schrenkiana globosa. (*M. D. G.* 1908, 59.) H. Plant about 6 ft. high, globose in shape. (E. Schelle, Tübingen, Germany.)

Pinus Cembra compacta. (*M. D. G.* 1909, 268, 327.) Coniferae. H. Compact and conical in habit. (Prince M. Lobkowitz, Eisenberg, Bohemia.)

Pittosporum heterophyllum × Tobira. (*R. H.* 1909, 470, f. 210.) Pittosporaceae. H. H. Garden hybrid. (Marseilles B. G.)

***Pleurothallis attenuata.** (*K. B.* 1909, 364.) Orchidaceae. G. Stems very short, covered with brown sheaths. Leaves elliptic, 1–1¼ in. long, 3–5 lin. broad, rather thick, minutely 3-toothed. Scapes slender, 3-4 lin. long, 2-4-flowered. Flowers about ⅔ in. long. Sepals and petals light green, with a dull purple band at the base and a little purple marbling above. Lip greenish-white, with a shallow keel on the front bearing 10 erect papillae. Country unknown. (Glasnevin B. G.; Kew.)

***Pleurothallis Birchenallii.** (*K. B.* 1909, 365; *G. C.* 1909, xlv. 270, 391, f. 173.) G. Allied to *P. insignis.* Stems rather slender, 1¾–3¾ in. long. Leaves elliptic-oblong, 3–4 in. long, ¾–1¼ in. broad. Scapes rather slender, 5 in. long, 3–7-flowered. Sepals very long-tailed, about 2 in. long, dull reddish-purple, the dorsal margined with light green at the base. Petals very long-tailed, 1¼ in. long, light green, striped with brown at the base. Lip 3-lobed, 5 lin. long; side lobes greenish-white; front lobe dull reddish-purple. Colombia. (J. Birchenall; Charlesworth & Co.)

Polygonum cuspidatum var. **spectabile.** (*R. H. B.* 1909, 232, 245, f.) Polygonaceae. H. Leaves petiolate, rather large, broadly ovate, acuminate, truncate at the base, marbled with pale yellow, cream-white, green and carmine-red. [Included in list of 1903 as *P. spectabile.*]

Polystachya campylolgossa. (*K. B.* 1909, 366.) Orchidaceae. S. Pseudobulbs tufted, ovoid, about 1 in. long, 2–3-leaved. Leaves oblong or linear-oblong, 2–4 in. long, 4–8 lin. broad. Scapes erect, subcompressed, pubescent, about 2 in. long, 1- or few-flowered. Flowers green, with a brown stain on the foot of the column and base of the lip. Sepals 5–6 lin. long, up to 5 lin. broad. Petals 4 lin. long. Lip 3-lobed, strongly recurved, 5 lin. long. Brit. E. Africa. (F. Sander & Sons.)

Polystachya stricta. (*K. B.* 1909, 63.) S. Pseudobulbs tufted, oblong, 1¾–3¼ in. long, 2-leaved. Leaves oblong, 3–5 in. long, ⅔–¾ in. broad. Panicle erect, straight, 9 in. long; branches up to 1 in. long. Flowers ⅓ in. long, light greenish-yellow, with a few faint purple streaks on the base and side lobes of the lip. Brit. E. Africa. (Cambridge B. G.)

Populus Carriereana. (*Späth Cat.* 1909–10, 106.) Salicaceae. H. Young plants with a broadly pyramidal habit and beautiful somewhat grey-green large leaves. Country unknown. (L. Späth, Berlin.) [*P. Carreiriana*, Dode.]

Populus Comesiana. (*M. D. G.* 1908, 154.) H. A high tree, with a broad head of branches. Leaves long-stalked, roundish, cuneate at the base, greyish-green and slightly hairy above, silver-white-tomentose beneath, entire or slightly and irregularly lobed and toothed. Italy.

Populus subintegerrima. (*M. D. G.* 1908, 153.) H. A small tree, with a roundish head of branches; bark pale ash-coloured, often with black warts. Leaves long-stalked, almost cuneate, undivided or slightly lobed towards the apex, irregularly toothed, almost green above, silver-white-tomentose beneath. Spain.

***Populus vistulensis.** (*Späth Cat.* 1909–10, 107.) H. Growth moderately strong. Branches spreading, clothed with medium-sized rhomboidal dark green leaves. Europe. (L. Späth, Berlin.)

***Primula Bulleyana.** (*N. B. G. Edinb.* iv. 231, tt. 39 a, 42; *G. C.* 1909, xlv. 332; xlvi. 15, ff. 9-11.) Primulaceae. H. Leaves similar to those of the common primrose, 5–7 in. long, 1½–1¾ in. broad; midrib red. Scape 1½–3 ft. high, farinaceous on the upper part. Flowers in 3–7 superposed whorls, fragrant. Corolla orange-buff or deep reddish-orange; tube cylindric below, funnel-shaped above; limb about ¾-in. across. S.W. China. (Bees, Ltd.; Edinburgh B. G.)

Primula cortusoides var. **lichiangensis.** (*N. B. G. Edinb.* iv. 217, t. 27; *G. C.* 1909, xlv. 332.) H.? Plant 6–14 in. high. Flowers fragrant,

rich rose-red or almost crimson, with a greenish-yellow eye. S.W. China. (Bees, Ltd.)

Primula denticulata grandiflora. (*T. H.* 1909, 101, 105, f.) H. Flowers as large again as in type, pure white to lilac or violet, rose or reddish. (G. Arends, Ronsdorf, Germany.)

***Primula Forrestii.** (*N. B. G. Edinb.* iv. 228, tt. 38, 39 b; *G. C.* 1909, xlv. 268, 274, 299, ff. 117–118, 129.) H. Plant very small or sometimes reaching a height of 9 in. Leaves petiolate, ovate-elliptic, subcordate or attenuated at the base, irregularly bicrenate, densely clothed with glandular hairs, the younger densely farinose beneath. Scape strong, erect, bearing an umbel of 10–25 flowers. Corolla deep yellow, with orange-coloured eye, fragrant as well as the leaves; tube 7 lin. long; limb about ¾ in. across. S.W. China. (Bees, Ltd.)

***Primula Littoniana.** (*N. B. G. Edinb.* iv. 225, tt. 33 b, 35, 36; *G. C.* 1909. xlvi. 15, ff. 6–8.) H. Leaves broadly lanceolate, 7–8 in. long, 1½–3 in. broad, rounded at the apex, attenuated at the base into a broadly winged petiole, irregularly dentate, greyish-green, hairy. Scape thick, erect, 1–2 ft. high, farinaceous. Inflorescence a dense spike up to 5 in. long. Bracts and calyx blood-red. Corolla violet-purple; tube about 3 lin. long, much longer than the calyx; limb concave, 3–4 lin. across. S.W. China. (Bees, Ltd.; Edinburgh B. G.) [*P. Viali*, Delavay.]

***Primula siberica chinensis.** (*Veitch Herb. P. Nov.* 1909–10, 3.) H. A perennial variety. Flowers lilac, with a white eye, larger than in the type. China. (J. Veitch & Sons.)

Pritchardia Wrightii. (*S. C. A. A. Cat.* 1908, 3.) Palmae. S. Remarkable for its barrel-shaped trunk, and very large almost rounded leaves which are more than 5 ft. across. Cuba. (Southern California Acclimatizing Association.)

Promenaea microptera. (*O. R.* 1909, 264.) Orchidaceae. G. Dwarf-growing, with elliptic-oblong pseudobulbs about ½ in. long. Leaves lanceolate, acute, 3½ in. long, about ½ in. broad. Flowers 1½ in. broad. Sepals and petals lanceolate, acute, light green. Lip 3-lobed, the basal half white, with numerous narrow purple bars, and the front lobe green, with 3 or 4 broad purple bars. Column pale green, with a purple stain at the base. Re-introduced. In cultivation in 1881. Brazil. (Stuart Low & Co.)

***Prunus paracerasus.** (*M. D. G.* 1909, 170.) Rosaceae. H. A new species intermediate between *P. serrulata* and *P. Pseudo-cerasus*. From the former it differs in having the pedicels, style, and usually the outside of the calyx, hairy, and from the latter, amongst other characters, in having the young leaves pale green, not bronze-coloured, and the calyx-lobes sharply serrate instead of nearly entire. Japan. (L. Späth, Berlin; Berlin-Dahlem B. G.)

Prunus pennsylvanica var. **saximontana.** (*M. D. G.* 1908, 160.) H. Differs from the type amongst other characters by its shrubby growth, broader and smaller pale green leaves, and few-flowered sessile umbels. N. America. (Arnold Arboretum.)

***Prunus Sargentii.** (*M. D. G.* 1908, 159; 1909, 164.) H. A new species which has been confused with *P. Pseudo-cerasus* from which it differs by having all its parts glabrous. It is nearest allied to *P. serrulata*, differing by having sessile umbels and more coarsely toothed leaves. Japan. (Arnold Arboretum.) [*P. Pseudo-cerasus*, Sargent, Gard. & For. 1897, 462, f. 58, not of Lindley.]

***Pseuderanthenum seticalyx.** (*B. M.* t. 8244.) Acanthaceae. S. An erect somewhat hirsute undershrub. Leaves petiolate, ovate, acuminate, 2–5 in. long, 1½–3½ in. broad. Inflorescence spicate, terminal or also in upper leaf-axils, at first dense, becoming 4 in. long, the slender bracts and calyx-lobes very conspicuous when young. Corolla salver-shaped; tube long, narrow, pale red; limb cinnabar-red above, paler beneath, 1 in. across. Nyasaland. (Kew.) [Syn. *Eranthemum seticalyx*, C. B. Clarke.]

Pteris aquilina congesta. (*G. C.* 1909, xlv. 205; *G. M.* 1909, 266.) Filices. H. Plant only 12–14 in. high. Fronds rich green, plumose, very compact. (H. B. May & Sons.)

Quercus aliena. (*M. D. G.* 1909, 282.) Cupuliferae. N. Without description. China; Corea; Japan. (Arnold Arboretum.)

Raphia Gentiliana. (*R. H. B.* 1909, 381.) Palmae. S. An elegant palm resembling a *Kentia* in habit, and having the pinnate leaves furnished with small prickles. Congo. (Laeken Col. G., Brussels.)

Rehmanni angulata var. **tricolor.** (*B. T. O.* 1909, 332.) Scrophulariaceae. G. Flowers at first bright purple, afterwards almost violet-rose, the upper lip shaded with vermilion, and the throat whitish, spotted with purple. Central China. (C. Sprenger, Naples.)

***Rehmannia Henryi.** (*K. B.* 1909, 262; *B. M.* t. 8302.) A perennial herb, 6–16 in. high, simple or branched at the base, glandular-pilose. Radical leaves elliptic-oblong, 3–7 in. long, 1–2½ in. broad, crenate-dentate or more or less lobed; stem leaves very similar, gradually smaller, long-stalked. Flowers axillary. Pedicels 1¼–2 in. long. Corolla-tube about 2 in. long, ¾ in. broad at the apex, dirty sulphur-yellow, minutely red-dotted; limb 2-lipped, nearly 2 in. across, white. Central China. (Kew.) [Syn. *R. Piasezkii*, Hemsl., not of Maxim.]

***Rheum Alexandrae.** (*Veitch N. H. P.* 1909, 5, f.; *R. H. B.* 1909, 297, f.) Polygonaceae. H. A distinct-looking species, with relatively small elliptic-ovate glossly dark green leaves, and flowering-stems 3–4 ft. high, conspicuous with large pale yellow leaf-like bracts. W. China; Tibet. (J. Veitch & Sons.)

Rhipsalis Novaesii. (*M. K.* 1909, 12, f.; *B. K.* t. 116.) Cactaceae. S. Plant erect, 2 ft. high, freely branched. Lower joints of the branches terete, 3–4 lin. thick, grey-green, ribbed, with areolae rather close together bearing short yellowish-white wool and 10–25 adpressed bristles about ½ in. long; upper joints in a whorl of 3–5, 5–6 in. long, not ribbed, with areolae destitute of wool. Flowers lateral, about 1¼ in. across, pale yellowish-white; segments 15 or 16, oblong. Ovary immersed. Brazil. (Berlin-Dahlem B. G.)

***Rhododendron adenopodum.** (*G. C.* 1909, xlv. 291, f. 125.) Ericaceae. H. or H. H. A bush 4–10 ft. high. Leaves oblong-lanceolate, 3–6 in. long, acute, coriaceous, smooth above, densely covered beneath with a close white tomentum. Inflorescence 4–6-flowered or more. Pedicels hairy. Corolla campanulate, pale rose, 2½–3 in. across. Pistil hairy. Central China. (M. L. de Vilmorin, Les Barres, France.)

***Rhododendron coombense.** (*B. M.* t. 8280.) H. A dwarf densely branched shrub; flowering-twigs slender, lepidote. Leaves persistent, oblong-lanceolate, 1¼–1½ in. long, apiculate, cuneate or somewhat rounded at the base, at first lepidote on both sides, finally glabrescent above, persistently lepidote beneath. Flowers in trusses of 3–5 at the ends of the branchlets. Calyx-lobes very short, rounded. Corolla broadly campanulate, pale purple, 1¼–1½ in. across. Ovary densely lepidote. China. (J. Veitch & Sons.)

Rhododendron lacteum. (*R. H.* 1909, 18.) H. Leaves large, coriaceous, densely covered beneath with a reddish tomentum. Flowers white. W. China. (Ph. L. de Vilmorin, Verrières-le-Buisson, France.)

***Rhododendron Souliei.** (*G. C.* 1909, xlv. 332, 380, f. 167 and suppl. ill.; *Gard.* 1909, 277, 278, f.) H. A bush 3–12 ft. high, sometimes flowering when only 1 ft. high; young shoots reddish. Leaves ovate-cordate, glaucous when young, afterwards reddish, finally green. Calyx glandular-ciliate. Corolla rose-pink, rather flat, 3–4 in. across; lobes 5, broad, rounded, emarginate. Ovary and style covered with sessile glands. W. China. (J. Veitch & Sons.)

Ribes amictum var. **hispidulum.** (*R. H.* 1909, 177, f. 64.) Saxifragaceae. H. Differs from the variety *pubescens* in having the shoots clothed with stiff glandular hairs, the flowers smaller, and the ovary and fruit glabrous. California. (E. de Janczewski, Cracow, Austria.)

Ribes amictum var. **pubescens.** (*R. H.* 1909, 177.) H. Distinguished from the variety *cruentum* (*R. cruentum* in the list of 1906) in being pubescent. (E. de Janczewski, Cracow, Austria.)

Ribes fuscescens. (*Späth Cat.* 1909–10, 115.) A garden hybrid between *R. bracteosum* and *R. nigrum*. (L. Späth, Berlin.)

Ribes futurum. (*Späth Cat.* 1909–10, 115.) A garden hybrid between *R. vulgare* and *R. Warszewiczii*. (L. Späth, Berlin.)

Ribes glaciale var. **minus.** (*Späth Cat.* 1909–10, 115.) H. More finely and densely branched than the type, with paler green leaves. E. Tibet. (L. Späth, Berlin.)

Ribes innominatum. (*Späth Cat.* 1909–10, 115.) H. A garden hybrid between *R. divaricatum* and *R. Grossularia*. (L. Späth, Berlin.)

Ribes Vilmorinii. (*Späth Cat.* 1909–10, 116.) H. A densely branched erect shrub about 6 ft. high, with ornamental foliage; young shoots with purple bark. Flowers greenish, in short racemes. Tibet. (L. Späth, Berlin.)

Robinia coloradensis. (*B. S. B. F.* 1908, 650.) Leguminosae. H. Differs from *R. neomexicana* by having longer and straighter shoots, leaflets somewhat larger, greener, and less numerous, flowers rose-white or rose, without any trace of lilac, fragrant, and the mature pods not echinate. Colorado. (M. L. de Vilmorin, Les Barres, France.)

***Rubus Koehneanus.** (*Späth Cat.* 1908–9, 123; *B. M.* t. 8246.) Rosaceae. H. A suberect shrub 3–4 ft. high; branches smooth or sparingly prickly, with a purplish bloom. Leaves simple, 3–5 lobed or sometimes almost entire, 1½–5 in. long, ¾–5 in. broad, usually deeply cordate at the base, green above, white-pubescent beneath; lobes acute or subacute; petioles ½–3 in. long, sparingly prickly. Flowers few, in loose terminal corymbs. Petals white, elliptic-oblong or obovate, about ½ in. long. Fruit globose, orange, small. Japan. (L. Späth, Berlin; Kew.) [*R. innominatus*, S. Moore.]

***Rubus omeiensis.** (*K. B.* 1909, 259.) H. A shrub with unarmed velvety branches. Leaves simple, petiolate, shortly 5-lobed or sometimes obscurely 7-lobed, 3–9 in. long and broad, nearly glabrous above, hoary beneath, rugose; lobes sinuate or sublobate, irregularly toothed, Panicles terminal, many-flowered, sometimes rather congested. Petals erect, obovate-elliptic, 2 lin. long, purple. Fruit unknown. Mt. Omei. W. China. (J. Veitch & Sons.)

***Rubus Veitchii.** (*K.B.* 1909, 258.) H. A shrub with prickly terete branches. Leaves pinnate, 2½–6 in. long; leaflets 5–9; lateral elliptic or obliquely ovate, coarsely toothed, ½ in.–1¼ in. long; terminal ovate-lanceolate or rhomboid, 1¾–3½ in. long, coarsely toothed or almost pinnatifid; all green and puberulous or silky-hairy above, hoary beneath; rhachis prickly, pubescent. Panicles terminal, few-flowered. Petals orbicular-obovate, 1½ lin. long, purple. Fruit globose, red. W. China. (J. Veitch & Sons.)

***Saccolabium penangianum.** (*O. R.* 1909, 351.) Orchidaceae. S. A small plant, only a few inches high. Leaves lanceolate, acute, 2½–3 in. long, ¼ in. broad. Spike cylindric, densely-flowered, about 1 in. long. Rhachis and pedicels pubescent. Flowers with light yellow sepals, puberulous outside, otherwise whitish, with the side lobes of the lip and wings of the column narrowly margined with purple. Spur about twice as long as the sepals. Malay Peninsula. (Kew.)

Saccolabium platycalcaratum. (*K. B.* 1909, 368.) S. Belongs to the section *Calceolaria* and is distinguished by the much flattened apex of the spur. A dwarf herb. Leaves oblong or elliptic-oblong, 1¾–2½ in. long, 7½–10 lin. broad. Scapes axillary, up to 2 in. long. Racemes short, 6–9-flowered. Flowers very small, with the sepals and petals yellow, spotted with brown, and the lip whitish, green on the fleshy centre of the front lobe. Upper Burma. (F. Sander & Sons.)

Salix Bakeri. (*M. D. G.* 1908, 154.) Salicaceae. H. A tree with slender pendulous branches. Trunk dark brown; young branches green, red on the side exposed to the sun. Leaves long-stalked, elongate-lanceolate, undulate, slightly toothed, pale green above, ash-grey beneath, with white midrib; stipules broadly cordate, amplexicaul, acuminate. N. America. (L. A. Dode, Paris; C. Sprenger, Naples.)

Salix Bonplandiana. (*M. D. G.* 1908, 154.) H.? A tall tree. Trunk ash-grey; young branches yellowish-green, rust-coloured or purple-dotted on the side exposed to the sun. Leaves long-stalked, lanceolate, long-acuminate, serrulate, with two warts at the base; petiole red; stipules cordate, semi-amplexicaul. N. America? Mexico. (L. A. Dode, Paris; C. Sprenger, Naples.)

Salix chrysocoma. (*B. S. B. F.* 1908, 655, f.) H. A hybrid between *S. babylonica* and *S. vitellina*. (L. A. Dode, Paris; L. Späth, Berlin.)

Salix Hankensonii. (*B. S. B. F.* 1908, 655, f.) H. Apparently a natural hybrid between a species of the group of *S. nigra* and one of the group of *S. babylonica*. New York. (L. A. Dode, Paris.)

Salix heterandra. (*B. S. B. F.* 1908, 654, f.) H. Shrub. Branches more or less torulose, thickish, glabrous, black or brown, shining. Leaves lanceolate-obovate or narrowly lanceolate, 3–4 in. long, remotely serrate, glabrous, light green above, whitish-glaucous beneath; petiole up to ½ in. long. Male catkins arcuate, about 1¾ in. long. Possibly a hybrid

between a species of the *S. purpurea* group and one allied to *S. pentandra*. Caucasus. (L. A. Dode, Paris.)

Salix lispoclados. (*B. S. B. F.* 1908, 651, f.) H. Intermediate between the group of *S. alba* and that of *S. pentandra*. Branches suberect, the younger shining, reddish. Leaves ovate-lanceolate, about 2½ in. long and ⅔ in. broad, serrate, light green and shining above, whitish-glaucous beneath. Male catkins appearing late, subconical, 5½–7 lin. long, 2½–3½ lin. broad. Caucasus. (L. A. Dode, Paris.)

Salix Medwedewii. (*B. S. B. F.* 1908, 652, f.) H. Allied to *S. triandra*. Shrub or small tree, with erect very slender branches, even the younger of which are glabrous and brown. Leaves very narrow, up to 4 in. long and 2½–3 lin. broad, glandular-serrate, whitish-glaucous beneath; nerves yellowish; petiole 2–3 lin. long, reddish. Female catkins appearing late, cylindric, 1½ in. long, 1½ lin. broad, rather dense. Caucasus. (L. A. Dode, Paris.)

Salix oxica. (*B. S. B. F.* 1908, 653.) H. Apparently allied to *S. fragilis* and easily recognised by its large glaucescent leaves, which give to the whole tree a bluish appearance. Central Asia. (L. A. Dode, Paris.)

Salix persica. (*M. D. G.* 1908, 154.) H. Similar to *S. babylonica*. Trunk pale ash-grey or brownish; young branches green, brownish on the side exposed to the sun. Leaves very shortly stalked, somewhat falcate, long-acuminate, serrulate, pale green above, greyish beneath; stipules wanting. Persia; Bokhara. (L. A. Dode, Paris; C. Sprenger, Naples.)

Salix renecia. (*B. S. B. F.* 1908, 656, f.) H. A hybrid of which *S. cinerea* is a parent. France. (L. A. Dode, Paris.)

Salix Tominii. (*B. S. B. F.* 1908, 652, f.) H. Belongs to a group allied to that including *S. alba*. Tree with spreading branches, the older blackish, shining; apex of shoots with white woolly hairs. Leaves obovate to lanceolate, 3⅓–4 in. long or more, ¾ in. broad, remotely serrate, at first silky-hairy on both sides, afterwards glabrate above and silky-hairy and whitish-glaucous beneath, somewhat rounded at the base; petiole 2½–4 lin. long, villose. Male catkins at first conical and rosy at the apex, afterwards ovate-cylindric, ¾ in. long, ⅓ in. broad. Stamens 2; filaments connate at the base. W. Asia. (L. A. Dode, Paris.)

Sambucus. (*M. D. G.* 1909, 1–56, ff.) Caprifoliaceae. H. Many new varieties or forms of *S. nigra*, *S. canadensis*, *S. racemosa*, *S. Ebulus* and other species are described by Fritz Graf von Schwerin. Several appear to be in cultivation, but they are chiefly of botanical interest only.

Sambucus nigra latisecta. (*Hesse Cat.* 1909–10, 160.) H. Characterized by its broadly lobed leaves. (H. A. Hesse, Weener, Hanover.)

***Saxifraga apiculata alba.** (*G. C.* 1909, xlv. 238; *Gard.* 1909, 195, 201, f.) Saxifragaceae. Flowers pure white or pale cream-coloured, borne freely on stems about 3 in. high. (Guildford Hardy Plant Nursery.)

***Saxifraga Clibranii.** (*G. C.* 1909, xlv. 300, f. 130; *G. M.* 1909, 371.) H. A free-flowering plant with a distinct habit. Flowers deep red, ½ in. across. (Clibrans.) [A form of *S. decipiens*, Ehrh.]

Saxifraga decipiens Arkwrightii. (*G. C.* 1909, xlv. 300, 314, f. 135; *G. M.* 1909, 371.) H. A handsome free-flowering variety. Flowers flattish, pure white, about ¾ in. across. (Baker & Co.)

Saxifraga intermedia. (*G. C.* 1909, xlvi. 195, f. 81.) H. Intermediate between *S. Stribnryi* and *S. Grisebachii* and apparently a natural hybrid between these species. (Kew.)

***Saxifraga madida.** (*G. C.* 1909, xlv. 20; xlvi. 370, f. 161.) H. An autumn-flowering species closely allied to *S. Fortunei*, but its leaves are more deeply 8- or 9-lobed. Petals entire. Japan. (Kew.)

Saxifraga scardica. (*B. M.* t. 8243.) H. A densely tufted herb. Lower leaves oblong, acute, ¼–⅔ in. long, ⅒–⅛ in. broad, rigid, with cartilaginous edges and 9–15 submarginal pits. Flowering-stems erect or ascending, 3–4½ in. long, 3–11-flowered, glandular-hairy, reddish, bearing scattered narrowly-oblong leaves. Calyx glandular-hairy outside; lobes subacute. Petals white, oblanceolate, 5-nerved, about ⅖ in. long. Balkan Peninsula. (Kew.) [This is the true *S. scardica*, Griseb. The plant usually met with in gardens under this name was figured in *B. M.* t. 8058, but it differs from the type in having subacute lower leaves, with fewer submarginal pits, 1–3-flowered green stems, and obtuse less pubescent calyx-lobes. It has been named *S. scardica* var. *obtusa*.]

***Saxifraga Stribnryi.** (*G. C.* 1909, xlv. 259 ; xlvi. 195, f. 81 ; *Gard.* 1909, 212, 214, f.) H. Leaves in rosettes similar to those of *S. Grisebachii*. Inflorescences drooping like those of *S. media*, but more branched. Stems, branches and flowers covered with glandular more or less red-tinted hairs. Bulgaria. (R. Farrar ; Kew.)

***Sempervivum poculiforme.** (*I. S. H. T.* vi. t. 234.) Crassulaceae. G. Stem simple, erect, more or less elongated. Basal leaves numerous, in a rosette, oblong-lanceolate, cuneate at the apex, serrate-ciliate, otherwise glabrous ; stem-leaves obovate-spathulate. Flowers in a panicle-like inflorescence with glabrous branches. Calyx glabrous ; teeth 9, lanceolate-triangular. Petals 9, lanceolate, acute, about twice as long as the calyx. Canary Islands ? (L. van den Bossche, Tirlemont, Belgium.)

***Senecio clivorum subcrenata.** (*Veitch N. H. P.* 1909, 6, f.) Compositae. H. Rather less robust than the type and less compact in habit. Leaves rounded, subcrenate. Flower-heads orange-yellow, smaller than in type. China. (J. Veitch & Sons.)

Senecio scandens. (*R. H.* 1909, 406, f. 171.) H. A woody climbing plant reaching a height of several yards. Branches slender, slightly hirsute. Leaves rather small, shortly petiolate, simple or with 2 or 3 leaflets at the base, elliptic-lanceolate, acute, bordered with small triangular teeth, greyish-green, finely pubescent on both sides. Flower-heads yellow, about ⅝ in. across, in lax terminal corymbs ; ray-florets about 8. Himalaya ; China. (Ph. L. de Vilmorin, Verrières-le-Buisson, France.) [This is *S. scandens*, Buch.-Ham., and is distinct from *S. scandens*, Hort., which is synonymous with *S. mikanioides*, Otto.]

***Sinofranchetia sinensis.** (*K. B.* 1909, 355.) Berberidaceae. H. A new genus allied to *Holboellia* and *Stauntonia*. It is a tall deciduous climber, with a main stem up to 3 or 4 in. thick. Leaves ternate, glaucous ; petiole 6–9 in. long. Flowers dull white, inconspicuous. Fruits 3 together at intervals on a rhachis 8 in. long or more, blue-purple, each about the size of an average grape. Central and W. China. (Arnold Arboretum ; Kew.)

***Sinowilsonia Henryi.** (*K. B.* 1909, 355.) Hamamelidaceae. H.? A deciduous shrub or small tree, sometimes over 20 ft. high. Leaves broadly elliptic to obovate, resembling those of a lime, 3–6 in. long, strongly veined and densely stellate-pubescent beneath, bristly-toothed. Flowers greenish, in slender pendulous racemes 9 in. long. Central China. (Arnold Aboretum.)

Sobralia Colmanii. (*G. C.* 1909, xlvi. 99 ; *O. R.* 1909, 276.) Orchidaceae. S. A garden hybrid between *S. xantholeuca* and *S. Veitchii*. (Sir J. Colman.)

Sobralia Elisabethae. (*G. C.* 1909, xlv. 83.) S. Stems 3 ft. high. Leaves distant, lanceolate, 5–6 in. long. Flowers about 9, produced in succession, in terminal flexuose racemes. Sepals and petals white, 2 in. long, the former lanceolate, the latter ovate, acute. Lip forming a tube around the column, expanded in front, emarginate, crisped, white with a chrome-yellow disk and faint rose lines from the base. Guiana. (Birmingham B. G.) [*S. Liliastrum*, Lindl.]

***Sobralia valida:** (*K. B.* 1909, 65.) S. Stems robust, glabrous, 8–10 in. high, 3- or 4-leaved. Leaves broadly elliptic, 5–8 in. long, 2½–3½ in. broad, amplexicaul, subacute, somewhat plicate. Spathe shortened, rather leafy. Flowers about 2 in. long, few, opening successively, fragrant, whitish-yellow, with a deeper yellow band on the lip, becoming deep orange in front. It belongs to a small group having an arrested inflorescence, glabrous leaf-sheaths, and a lip with crested veins. Panama. (Kew.)

Sophro-cattleya Blackii. (*G. C.* 1909, xlvi. 174 ; *O. R.* 1909, 314, 361, f. 28 ; *G. M.* 1909, 706.) Orchidaceae. G. A garden hybrid between *Sophronitis grandiflora* and *Cattleya Hardyana*. (R. G. Thwaites.)

Sophro-cattleya Thwaitesii. (*G. C.* 1909, xlv. 174 ; *J. of H.* 1909, lviii. 295, f., as *S.-c. Thwaitesae*.) G. A garden hybrid between *S. grandiflora* and *Cattleya Mendelii*. (R. G. Thwaites.)

***Sorbus japonica.** (*Späth Cat.* 1909–10, 122 ; *Hesse Cat.* 1909–10, 163.) Rosaceae. H. Differs from *S. Aucuparia* in being glabrous and in having the bright green leaves of the same colour on both sides. The flowers have the disk hairy only around the style. See *Gfl.* 1901, 408. Japan. (L. Späth, Berlin ; H. A. Hesse, Weener, Hanover.) [Syn. *Pyrus Aucuparia*, Ehrh. var. *japonica*, Franch. & Sav.]

***Sorbus Vilmorini.** (*B. M.* t. 8241.) H. The correct name of the plant included in the list of 1904 as *Cormus foliolosa.*

Spiraea Ramaleyi. (*Späth Cat.* 1909–10, 123.) Rosaceae. H. Resembles *S. intermedia*, but the leaves are more hairy and the young shoots are brownish. It is stated to be a strong-growing shrub about 8 ft. high, with large clusters of white flowers. Colorado. (L. Späth, Berlin.) [Syn. *Physocarpus Ramaleyi*, Nelson.]

Spiraea venusta magnifica. (*G. C.* 1909, xlvi. 99; *G. M.* 1909, 634, f.) H. Flowers larger and of a richer colour than in the type. (A. Perry.)

Stanhopea convoluta. (*K. B.* 1909, 366.) Orchidaceae. S. Pseudobulbs ovoid or ovoid-oblong, about 2 in. long. Leaves petiolate, elliptic or elliptic-oblong, 12–14 in. long, 3½–6 in. broad, 5–7-nerved. Scape short, 2-flowered. Sepals somewhat spreading, concave, about 3 in. long, 1½–1¾ in. broad, ivory-white. Petals connivent, enveloping the column, 2 in. long, 1¼ in. broad, ivory-white, with buff tips. Lip 3-lobed, very fleshy, 1¾ in. long, buff-yellow, with the interior of the sac orange. Colombia. (Fl. Claes, Etterbeek, Brussels.)

***Staphylea colchica Hessei.** (*Hesse Cat.* 1909–10, 168.) Sapindaceae. H. A fine form with bright rose-coloured flowers. (H. A. Hesse, Weener, Hanover.)

***Staphylea lobocarpa.** (*Lemoine Cat.* 1909, n. 173, vii.) H. A shrub 9–22 ft. high, with white or rose flowers. Central China. (V. Lemoine & Son, Nancy.) [*S. holocarpa*, Hemsl. in K. B. 1895, 15.]

Stereospermum sinicum. (*S. C. A. A. Cat.* 1908, 20.) Bignoniaceae. G. A rapid-growing tree reaching a height of 60 ft., with ornamental bipinnate leaves and upright panicles of large pinkish-white flowers. S. China. (Southern California Acclimatizing Association.)

***Strophanthus Preussii.** (*B. M.* t. 8250.) Apocynaceae. S. A climbing shrub, with stems up to 2 ft. long. Leaves elliptic to obovate, sharply acuminate, 2–4 in. long, 1½–2 in. broad. Cymes terminal, pedunculate, usually many-flowered. Coralla yellowish-white or pale orange, the tube reddish, scales at the throat and the tails purple; tube nearly 1 inch long; lobes ovate, contracted into filiform tails which are up to 1 ft. long. W. Trop. Africa. (Kew.)

***Sycopsis sinensis.** (*K. B.* 1909, 356.) Hamamelidaceae. H. An evergreen shrub, up to 20 ft. high, resembling in habit the common hazel (*Corylus Avellana*). Leaves ovate-lanceolate, 2–4½ in. long, rather coriaceous, glabrous, slightly toothed or entire. Flowers in short dense racemes, chiefly conspicuous on account of their red stamens. (Arnold Arboretum; Kew.)

Symphoricarpus ovatus. (*Späth Cat.* 1909–10, 125.) Caprifoliaceae. H. A densely branched shrub with pendulous habit. Leaves dark bluish-green. Flowers campanulate, 3–4 lin. long, rose. Fruits white. (L. Späth, Berlin.)

Syringa persica rubra. (*M. D. G.* 1908, 191.) Oleaceae. H. A red-flowered form. (C. F. Niemetz, Temesvár, Hungary.)

Syringa velutina. (*M. D. G.* 1908, 191.) H. Similar to *S. Emodi rosea* and *S. Josikaea rosea.* Its flowers are of the same colour but they are smaller, less open, and appear much earlier. Panicles markedly smaller. Corea. (Simon-Louis frères, Plantières, Metz.)

***Tapiscia sinensis.** (*K. B.* 1909, 356, f.) Sapindaceae. H.? A small deciduous tree, usually about 30 ft. high. Leaves pinnate, 12–18 in. long, changing to yellow in autumn; leaflets ovate-cordate, 3–5 in. long, 1½–2½ in. broad, serrate, acuminate, greyish beneath. Flowers yellow, $\frac{1}{12}$ in. long, fragrant, in axillary panicles 4–6 in. long. Fruit ovoid, black, ½ in. long. Central and W. China. (Arnold Arboretum; Kew.)

***Tetracentron sinense.** (*K. B.* 1909, 356. f.) Trochodendraceae. H. A tree reaching a height of 80 ft. or more. Leaves deciduous, alternate, broadly ovate, 4–5 in. long, subcordate at the base, serrate, with 5 or 7 prominent longitudinal nerves. Flowers small, yellowish, in slender spikes about 4 in. long. The tree resembles *Cercidiphyllum japonicum* and belongs to the same order, which is closely allied to Magnoliaceae. Central and W. China. (J. Veitch & Sons.)

Tilia Miyabei. (*M. D. G.* 1909, 285.) Tiliaceae. H. A very handsome tree reaching a height of nearly 100 ft., with a trunk 3–5 ft. thick. Bark, leaves, flowers and fruit similar to those of *T. Michauxii.* Japan. (Arnold Arboretum.) [Syn. *T. Maximowicziana*, Shirasawa.]

***Tilia Oliveri.** (*Veitch N. H. P.* 1909, 6.) H. Similar in habit to *T. argentea.*

Leaves cordate, glabrous above, white-tomentose beneath. See *Hook. Ic. Plant.* sub t. 1927. Central China. (J. Veitch & Sons.)

*Tinnea Sacleuxii. (*I. S. H. T.* vi. t. 238.) Labiatae. S. A dwarf shrub. Branches shortly and densely pubescent. Leaves shortly stalked, oblong or ovate, entire, ¾–1 in. long, ⅔ in. broad. Cymes axillary, 2–5-flowered. Calyx membranous, deeply 2-lipped, persistent. Corolla nearly 1 in. long, 2-lipped, the lower lip much longer than the upper. Near *T. aethiopica*, but the flowers are not solitary and the calyx is deeply 2-lipped. Tropical Africa? (C. Sprenger, Naples; L. van den Bossche, Tirlemont, Belgium.)

Tradescantia hypophaea. (*Gfl.* 1909, 17.) Commelinaceae. S. Remarkable for the red-brown colouring of the foliage in late summer. S. America. (G. Bornemann, Blankenburg, Germany.) [*T. geniculata*, Jacq.]

*Tripterygium Wilfordii. (*M. D. G.* 1909, 283.) Celastraceae. H. A shrub resembling in habit *Rubus Idaeus*. Branches straight, curved or often zigzag, 3–6 ft. long, somewhat 5-angled, glabrous, clothed with numerous small warts. Leaves alternate, ovate or ovate-oblong, often 4–6 in. long, abruptly acuminate, serrulate, rounded at the base. Panicles terminal, up to 8 in. long. Flowers small, numerous, greenish-white, fragrant. Fruits 3-winged, usually about ⅔ in. long and nearly as broad. Corea, Central China, Formosa. (Arnold Arboretum.)

*Trollius pumilus yunnanensis. (*Veitch Herb. P.* Nov. 1909–10, 5, f.) A distinct plant not unlike *Caltha palustris* in habit, with dark green leaves and bright golden-yellow flowers. China. (J. Veitch & Sons.)

Tunica Saxifraga alba plena. (*G. C.* 1909, xlvi. 99; *G. M.* 1909, 634.) Caryophyllaceae. H. A form with white double flowers. (Baker & Co.)

Valeriana ceratophylla. (*R. H. B.* 1909, 369.) Valerianaceae. H. H. A slender sparingly leafy plant reaching a height of 16 in. Flowers snow-white, in terminal umbels. Mexico.

*Viburnum Henryi. (*Veitch N. H. P.* 1909, 7, f.; *R. H. B.* 1909, 296, f.) Caprifoliaceae. H. An evergreen shrub. Leaves lanceolate, 3–5 in. long, 1–1½ in. broad, glossy green, serrate; midrib yellow, prominent. Flowers white, very small, in terminal pyramidal panicles. Fruits coral-red. Central China. (J. Veitch & Sons.)

*Viburnum Hessei. (*Gfl.* 1909, 89, 266, f. 6; *Hesse Cat.* 1909–10, 180.) H. A dwarf densely branched shrub. Leaves strongly plicate at the base, rounded to rounded-ovate, 2½–3¼ in. long, 2–2¼ in. broad, acuminate, rounded or subcordate at the base, shortly and very broadly toothed, more or less hairy in the axils of the nerves beneath or glabrate. Corymbs shortly pedunculate, ¾–1¾ in. across. Flowers pure white. Fruits coral-red. Closely allied to *V. Wrightii*. Probably China or Japan. (H. A. Hesse, Weener, Hanover.)

Viburnum Tinus macrophyllum. (*M. D. G.* 1908, 155, 220.) H. Leaves up to nearly 6 in. long and 3½ in. broad. Inflorescences as large again as those of the type. Flowers reddish. Corfu.

*Viola Rydbergi. (*G. M.* 1909, 283.) Violaceae. H. A vigorous-growing species, reaching a height of 9–12 in., and bearing large white flowers slightly tinged with purple. N. America. (S. Arnott.)

Vitis vomerensis. (*Gard.* 1909, 188.) Ampelidaceae. H. A very robust plant with brown-felted stems. Leaves large, leathery, deeply cut into fine lobes, covered with a light brown tomentum, deep olive-green when fully developed. (Observed in a Nice villa garden.)

*Vitis Wilsonae. (*G. C.* 1909, xlvi. 236, f. 101.) H. Belongs to the *V. armata* group. Leaves almost regularly 5-sided, with a circular depression at the base, the principal veins terminating in small points, otherwise almost entire, becoming deep red in autumn. China. (J. Veitch & Sons.)

Wedelia oblonga. (*G. C.* 1909, xlv 18.) Compositae. H. H. A glandular-hairy herb, reaching a height of almost 3 ft. Leaves oblong or oblong-lanceolate, acute, 3–3½ in. long, ¾–1 in. broad. Peduncles 1½–2 in. long. Flower-heads lemon-yellow, 1½–2 in. across; outer bracts leaf-like, ovate-lanceolate, about ⅓ in. long; inner somewhat scarious; ray-florets about 12, 3-toothed. Brit. E. Africa. (J. Veitch & Sons.)

Xanthosoma nuevo-leonense. (*S. C. A. A. Cat.* 1908, 10, as *Anthosoma*.) Araceae. S. The "colossal elephant's ear," growing to 6 ft. high, with very large leaves which stand almost horizontal. Mexico. (Southern California Acclimatizing Association.)

Xylosma Salzmanni. (*S. C. A. A. Cat.* 1908, 13.) Bixaceae. S. A shrub bearing straight spines sometimes 2 or 3 in. long or more. Leaves very variable in shape and size, usually elliptic, 1½–4 in. long, serrate. Flowers very small, in auxiliary clusters. Fruits small, black, resembling bilberries. Brazil. (Southern California Acclimatizing Association.)

Yucca Draco. (*B. T. O.* 1909, 180.) Lilaceae. G. A garden hybrid between *Y. flaccida* and *Y. aloifolia*. (C. Sprenger, Naples.)

Zygocolax Charlesworthii. (*G. C.* 1909, xlvi. 364; *G. M.* 1909, 947.) Orchidaceae. G. A garden hybrid between *Zygopetalum Perrenoudii* and *Colax jugosus*. (Charlesworth & Co.)

Zygonisia Sanderi. (*G. C.* 1909, xlv. 174.) Orchidaceae. G. A garden hybrid between *Aganisia lepida* and *Zygopetalum* sp. (F. Sander & Sons.)

Zygopetalum Clarksonii. (*G. C.* 1909, xlv. 301; *O. R.* 1909, 156.) Orchidaceae. G. A garden hybrid between *Z. crinitum* and *Z. Clayi*. (H. S. Goodson.)